

THE DEVELOPMENT OF A
SENSE OF IDENTITY
DURING THE ADOLESCENT PERIOD

By

ANN SHORT

Presented in fulfillment of the
requirements for
the M.A. Degree in Psychology

University of Cape Town

1972

The copyright of this thesis is held by the
University of Cape Town.
Reproduction of the whole or any part
may be made for study purposes only, and
not for publication.

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

ACKNOWLEDGEMENTS

I wish to thank the following people:

Dr. V.M. Grover for supervising for this thesis and for providing valuable advice on the research design and on construction of the measuring instruments.

Mr. A. Abramovitz for taking over the supervision of this thesis after Dr. Grover's retirement.

Mr. R. Oxtoby and Mrs. Juritz for their advice on the statistical analysis.

Mr. H. Smith for doing the major part of the statistical analysis.

The Principal, teachers and pupils of the school at which this research was conducted. Their co-operation is greatly appreciated.

C O N T E N T S

INTRODUCTION	1
PART I: THEORETICAL FRAMEWORK	16
1. Historical Perspective	18
2. Definition of Terms and Some Theoretical Issues	29
3. The Life Cycle and the Epigenesis of Identity	38
4. Adolescent Development: Various Aspects of the Identity Conflict	50
5. The Process of Identity Formation during the Adolescent Period	58
6. Different Types of Identity Formation and Aetiological Factors	74
PART II: RESEARCH DESIGN	
1. A review of the Research in the Field	84
2. General Method and Relevant Variables	99
3. Hypotheses and Criteria for Identity Classifications	117
4. Pilot Study	123
5. Measuring Instruments:	
(1) Ego Identity Scale (EIS)	127
(2) Peer Nomination Form (PNF)	141
(3) Vocational Plans Questionnaire	149
(4) Problems Scale	155
(5) Values Questionnaire and Value Judgements Scale (VJS)	159
(6) Janis-Field Feelings of Inadequacy Scale	164
(7) F-Scale Items: Authoritarian Submission and Conventionalism	167
(8) The Rating Scales and Sociogram	170
(9) Other Measures and Sources of Data	175
6. General Procedure	177
7. Description of the sample	180

PART III: RESULTS

1.	Identity Classifications	187
2.	Tests of the Hypotheses	219
3.	Relationships between the Major Variables	238
	Discussion	259
4.	Analysis of the EIS Sub-scales	281
5.	Analysis of the Peer Nomination Form Item Responses and Sub-scale Scores	296
6.	Analysis of the Problems Scale Responses	305
7.	Vocational Plans	320
8.	Analysis of the Value Judgements Scale	333
9.	Value Patterns	339
10.	Rating Scales	351
CONCLUSIONS		362
SUMMARY		376
REFERENCES		390
APPENDICES		Vd. II

INTRODUCTION

This study was motivated by an interest in young people which stemmed from working with ordinary high school pupils and not from the academic study of adolescent psychology. In order to find a suitable subject for research I turned to those books which were likely to give a cross-section of the literature in the field, for example, the survey provided by Gottlieb & Reeves (1963) and various books of 'readings' (Seidman, 1953; Bier, 1963; Mussen, Conger & Kagan, 1965; Grinder, 1969; Gold & Douvan, 1969). This created an impression of a large number of narrow, insulated empirical studies pragmatically ordered according to various dominant 'themes' (e.g., physical and cognitive development, family and peer relations, values, problems, interests) and relatively few isolated 'theoretical' articles. Few of the empirical studies were grounded in theory or attempted to relate their findings to any theoretical framework, while most of the theoretical articles seemed to be speculative.

The empirical research concerning the development of a self-concept during adolescence aroused my interest but much of it also lacked a theoretical framework. It was then suggested that Erik Erikson's theory of identity formation in adolescence might provide a more comprehensive and coherent framework for an empirical investigation.

A detailed study of Erikson's major writings (1965, 1968) made a profound impression, but the problems involved in operationally defining 'a sense of identity' and in planning a feasible research design seemed almost insurmountable at first. Very little empirical research had been done on Erikson's concept of identity

and most of the studies used college students as subjects and were so narrow as to be almost meaningless. Nevertheless, these studies did provide a basis for the present research design.

Major objectives: The overall objective of this study, stated in general terms, is to investigate the development of certain aspects of personality in a sample of normal adolescents within the framework of Erikson's theory of identity formation.

The emphasis is on development and therefore one of the more specific objectives is to identify variables which change as a function of age. In order to do this a cross-sectional design is used which includes three age groups (13-, 15- and 17-year-olds). But more specifically the study focusses on the development of a sense of identity. The variables (the 'certain aspects of personality') included in this study are those which would be expected to be related to identity development according to Erikson's theory.

The investigation of identity development is conducted on two levels: firstly, the relationships between scores on a measure of identity and the major variables (including age) are analysed; and secondly, the subjects are classified according to various types and stages of identity development. Certain specific criteria (derived from Erikson's theory and other research) were used as a guide but the classifications were based on an appraisal of each subject's total configuration of scores.

The method used for the classifications and the reason why it was considered necessary are spelled out in the text, but basically it serves to order the data according to Erikson's theoretical model of development. The objective is to determine whether, and to what degree, this method of classifying individual subjects helps to account for the variance found in the data in a meaningful way. In turn, the analysis of the data in terms of this model should contribute to our understanding of identity development.

It must be emphasized that the primary objective of this study is to investigate adolescent development in terms of Erikson's theoretical model, not to validate Erikson's theory. The research design rests, to a certain extent, on the assumption that Erikson's theory is valid. Of course, if it is found that the subjects cannot be classified according to Erikson's model or that scores on relevant variables do not discriminate between the identity classifications in the expected directions, this would give cause to doubt the validity of Erikson's theory but the difficulty may also be methodological.

A secondary objective of this study is to provide normative, descriptive data on certain aspects of adolescent personality development and on their problems and values. The sample represents white, English-speaking, gentile South African high school pupils of average and above average intelligence from a middle class background. This aspect of the study involves the analysis of age, sex and socio-economic differences.

Usefulness: Firstly, it is hoped that by analysing adolescent personality development from the point of view of a particular theory this will help to integrate empirical data and therefore contribute to our understanding of adolescence.

Secondly, few attempts have been made to investigate identity formation in a normal high school population. Erikson's theoretical formulations are based on clinical observations of mildly and severely disturbed adolescents, adults and children; on anthropological observations (the Sioux and the Yurok Indians); on the analysis of the biographies and life histories of exceptional men (G.B. Shaw, S. Freud, William James, Luther and Gandhi); and on socio-historical analyses (Hitler and German youth, Maxim Gorky and Russian identities, and American identities). There is a distinct lack of data on identity formation in ordinary high school pupils (most studies have involved college students who may be atypical in certain respects) and the question is still open as to whether Erikson's theory is useful in understanding the vicissitudes of so-called normal adolescent development. This study hopes to provide some sort of answer to this question and to increase our understanding of identity formation in ordinary adolescents.

Thirdly, this study also makes a contribution to the literature on a methodological level. Most of the research on identity formation has come from clinicians and this is partly because 'a sense of identity' is so difficult to measure. The only other successful studies have used the interview technique (e.g. Marcia, 1966, 1967; Douvan & Adelson, 1969) but this method is often impractical and it has certain methodological weaknesses. This study uses the

questionnaire method for obtaining data and although the classification method used is not objective, the findings may provide foundations for developing an objective and practical method for investigating identity development in large samples. Alternatively, it may show that the questionnaire method is not an adequate technique for 'measuring' identity development.

Finally, it is hoped that the results of this study will be of use to those who work with ordinary high school pupils such as teachers and school psychologists.

Some theoretical issues: Erikson's theory was chosen mainly because it made sense on a purely subjective level and because it contributed more to my understanding of adolescents than other theories which I had read. No attempt will be made to rationalize this choice and no attempt will be made to show that this theory is any 'better' than any other theory. Similarly, no systematic attempt will be made to interpret the findings of this study in the light of other theories of adolescence. However, there are reasons for this.

As Baldwin has pointed out, most developmental theories 'talk past each other' (1967, p.583). This is not merely a consequence of the fact that different theories tend to focus on different areas of behaviour but theories which differ markedly are usually based on different assumptions, use different terminologies and different frames of reference, and generate different theoretical models and, most important, different methodologies for obtaining and analysing data.

The most dramatic differences of the above type are between the psychoanalytically-oriented theories and those based on learning theory principles, and it is these basic differences which make it impossible to verify one theory using the methods of the other.

Sears was aware of this:

"The reformulations of the theories - particularly that of anaclitic identification - were therefore less a translation of psychoanalytic language into behaviour terms than conversion of a map of something seen into a set of operationally defined variables the interactions among which would account for the development of what was seen and for the differences among individuals in that rate of development. The research that followed must not be viewed as an attempted verification of psychoanalytic concepts, therefore, but as a testing of a behavioural theory that was suggested by psychoanalytic observations and was then constructed within the framework of an entirely different theoretical structure." (Quoted in Baldwin, 1967, p. 438.)

The implications of this statement are that the empirical verification of theoretical formulations must be grounded in the theoretical framework in which those formulations are embedded: the operational definitions used and the research design must be congruent with the theoretical model. The results obtained would then either support or negate those theoretical formulations. Because the present research has been conceived within a psychoanalytic (more specifically Eriksonian) framework it would be very difficult, and probably futile, to interpret the findings in learning theory terms.

Attempts have been made to integrate theories based on learning theory and those which are more psychoanalytically oriented. For instance, Maier (1965) tries to integrate the theories of Piaget, Erikson and Sears but the result is an uncertain compromise which avoids the basic issues concerned with the motivation of behaviour, the factors which determine development and the basic nature of development.

It is on these issues that Sears's theory is incompatible with the theories of Erikson and Piaget.

The underlying principles of the theories of Erikson and Piaget are similar although the models generated are slightly different. But Piaget does not present an alternative to Erikson's theory because he deals with a different area of development. Instead Piaget's theory of cognitive development contributes to our understanding of identity development. Cognition is a function of the ego although it is important to distinguish between cognitive and ego development. An attempt will be made to show, on logical and theoretical grounds, that an individual cannot develop a fully autonomous sense of identity before he has developed formal operations.

Another theory which also contributes to a more comprehensive understanding of adolescent development is that of Blos (1962, 1968). This theory is more closely tied to psychoanalytic concepts than Erikson's but both Erikson and Blos see adolescence as a period in which significant new development takes place. This is in contrast to the traditional psychoanalytic view which emphasizes the revival of pregenital psychosexual conflicts and sees the main task of adolescence as the resolution of these conflicts so that genital satisfaction with a 'non-incestuous love object' can be achieved. The concepts of identity formation and 'character formation' (Blos) involve far more than the resolution of infantile conflicts. Blos's theory of character formation complements Erikson's theory of identity formation because it focusses on psychosexual and intrapsychic development while Erikson focusses on psychosocial and interpersonal development.

Muuss (1962) provides a comprehensive summary of the major theories of adolescence. Many of these theories are not essentially different from Erikson's theory, especially the German theorists Spranger, Kroh and Rempelin and the more contemporary American writers, Friedenberg and Nixon. Kurt Lewin's theory of adolescence is also basically in agreement with Erikson although it is conceptually quite different from any other theory.

The most important common ground in the above theories is that they all view adolescence as a period of new development which involves self-discovery; the establishment of autonomy, a personal set of values and goals for the future; and the preparation for adulthood. Another theory which is congruent with the above views is Loevinger's theory of ego development (1966). She uses the same type of model as Piaget (i.e., hierarchical stages) and her stages are not tied to specific age periods. But her fifth and sixth stages (the conscientious and autonomous stages) logically coincide with adolescence (her stages are described in Appendix A-1).

All these theories are implicitly or explicitly stage theories and they contrast markedly with the theories which view development as a continuous process from birth to maturity. These are mainly the theories based on learning theory principles - Hollingworth (Muuss, 1962), Bandura (1969), Sears (Maier, 1965). Stage development versus continuous development is one of the major issues in adolescent (and developmental) psychology. It is an issue which is difficult to resolve because the different models of development generate different methods of research. The problems will be clarified in the following discussion on methodological issues.

A related issue concerns the Sturm und Drang view of adolescence which originated in G. Stanley Hall's theory and has become equated with the psychoanalytic viewpoint. The learning theorists contend that adolescence is not a period of excessive conflict. A number of theorists, including Erikson and more explicitly Spranger, have adopted a middle path: they suggest that for many adolescents development is relatively smooth and conflict-free, but for some it is a period of greater or less storm and stress. The findings of this study should throw some light on this issue.

Another major issue which has died down recently concerns the determinants of development - physical maturation (Arnold Gesell) versus environmental forces (learning theory). Erikson's position on this issue, like many others, is that both these factors are important. An issue which has also generated controversy concerns the importance of peer versus parent values in adolescence. The psychoanalytically-oriented theories maintain that there is a shift from parent to peer values and that this is a necessary part of the adolescent's 'struggle' for independence. The extreme view for the peer culture is advocated by Coleman (Muuss, 1962). On the other hand, Bandura (1969) contends on the basis of empirical evidence that peer values reinforce parent values and that there is little conflict between adolescents and their parents. The findings of this study may be able to clarify this issue indirectly.

Methodological issues: The most obvious initial problem was simply how to measure 'a sense of identity' because it is such an indefinable quality (not quantity). In the final analysis, a sense of identity

can only be inferred because it involves not only conscious attitudes, values, self-image and social roles but also unconscious ego-functioning - the degree and quality of ego integration. In order to make reliable inferences of this nature one needs to obtain a considerable amount of in-depth information about individual subjects.

The method devised by Prelinger & Zimet (1964) for assessing character using an ego-psychological approach would probably be the most suitable method. They have designed a comprehensive set of five-point rating scales covering many facets of ego functioning (e.g. defense mechanisms, ideational styles, ego strengths) and Erikson's psychosocial stages. These rating scales can be used to quantify data obtained from interviews, intelligence tests and projective tests. But this method is extremely time-consuming and requires a highly-skilled research team.

The method which evolved in this study uses the questionnaire technique for obtaining data on a considerable number of variables considered relevant to identity formation. Although a measure of identity vs. identity confusion was included in the test battery, this instrument is experimental and there was considerable doubt about its usefulness as a measure of identity development. No measure of identity development was available and so the system of classifying subjects according to various stages and types of identity formation was incorporated into the design. Measures were included to provide data which would be expected to differentiate between some of the classification categories and specific criteria (in terms of scores on various measures) were laid down for each

category. But because most of the measuring instruments were experimental the criteria were used only as a guide in making the classifications, which were based on inferences derived from a more-or-less subjective assessment of each subject's total configuration of scores.

This means that the validity of the classifications can be questioned, and even though the data is analysed to determine whether scores on each variable differentiate significantly between subjects in each identity classification in the expected direction, this analysis is contaminated by the fact that the identity classifications were made on the basis of these same scores, i.e., there is no external criterion. It is for this reason that this study cannot be regarded as an adequate test of the validity of Erikson's theory.

Although the classification procedure attempts to order the data according to Erikson's theoretical model, the complexity of this model and the implications of this model for measurement were not fully grasped when the research design was planned.

As Emmerich (1969a & b) and Loevinger (1966) point out, the measurement strategy and the method of statistical analysis used in developmental studies depends on the model of development. The trait theorist (to use Emmerich's term) seeks to establish the universality of bipolar traits and to determine the stability of traits over time. He recognizes that the behavioural manifestations of a general dimension (e.g. independence vs. dependence) will change as a function of age and he will take this into account in his measurement devices. He seeks to maximize individual

differences at any given age and minimize changes across age groups.

The stage theorist, on the other hand, believes that development consists of a series of qualitative changes in the organization of behaviour, and he seeks to identify the behaviour patterns characterizing each stage. He will therefore use a measurement strategy which will attempt to minimize individual differences within each stage and maximize differences across stages (i.e., ages).

Development in the sense of a progression through hierarchical stages is characterized by 'milestone sequences' which are defined by Loevinger (1966) as "observable behaviours that tend to rise and then fall off in prominence as one ascends the scale of ego maturity" (p.202). These milestone sequences are universal insofar as all individuals in a given stage will display the behaviours which characterize that stage.

In order to measure milestone sequences (hierarchical stage development) one has to assess which of the behaviour patterns, which define each stage, is most characteristic of the behaviour of the individual subject, e.g., according to Loevinger's theory, is his behaviour predominantly conformist or predominantly conscientious? It serves no useful purpose to turn these traits into bipolar variables (e.g. conformity vs. non-conformity) and to measure the degree of conformity, degree of conscientiousness and so on, because the individual in the conscientious stage may also be conformist rather than non-conformist - high scores on a measure of conscientiousness and on a measure of conformity will not help to identify which of the two stages the individual is in.

Loevinger (1966) also distinguishes 'milestone sequences' from 'polar aspects'. The latter are behaviour characteristics which continually decrease or increase as a function of age (e.g. degree of independence can be shown to increase steadily with age). Measurement of these variables will not help to identify stage of ego development either.

To digress for a moment, it is therefore possible to measure the same behavioural dimension and arrive at completely different conclusions depending on how it is operationally defined and on how it is measured. Let us take as an example autonomy (or independence): Loevinger (1966) defines autonomous behaviour absolutely (i.e., without regard for age specific manifestations) and using her technique of measurement, she could show that autonomous behaviour only becomes a dominant behaviour pattern in the sixth stage (which would not be before adolescence) and that it does not appear in some at all.

But if independence vs. dependence is treated as a 'polar aspect' and the degree of independence is measured, it could be shown that independence increases continually as a function of age. But if measurements of independence vs. dependence involve age-specific manifestations of this trait, then it could be shown that this is a stable personality dimension which does not change with age.

It is these kinds of methodological differences which could account for much of the conflicting findings in developmental research.

It is therefore necessary to specify exactly what one is measuring and how.

As Loevinger (1966) points out as well, it is necessary to distinguish between development and adjustment. The latter is a relatively stable personality dimension and will not be expected to change very much with age. The approach to measuring adjustment is the same as the 'trait' theorist's approach. Loevinger's hierarchical model of ego development is independent of adjustment just as Piaget's model describes stages of cognitive development which are unrelated to individual differences in intelligence.

Insofar as Erikson's model describes a fixed sequence of stages in psychosocial ego development it resembles the models of Loevinger and Piaget. But Erikson's model also encompasses the psychosocial adjustment dimension. A sense of identity characterizes psychosocial adjustment in the fifth stage while identity confusion characterizes psychosocial maladjustment in this stage. Thus in Erikson's model there are two dimensions: the hierarchical developmental dimension (stages) and the horizontal adjustment dimension (identity versus identity confusion which is a continuum, not a dichotomy).

Erikson's model, therefore, makes measurement extremely difficult because the strategies involved in measuring stage development and adjustment ultimately work at cross purposes. On a measure of identity versus identity confusion (horizontal dimension) individuals who are psychosocially adjusted will obtain high scores regardless of the stage of development they are in. In order to measure development it is necessary to identify those behavioural manifestations which are peculiar to a specific stage. It was this problem which was not fully grasped when the measuring

instruments were designed for this study. Thus most of the measuring instruments used in this study reflect the adjustment continuum and the interpretation of results has to take this into account.

A further complication in Erikson's theory is that within the fifth stage the development of a sense of identity may involve some degree of identity confusion or it may not. But one cannot predict any general developmental (age) trend along this dimension because identity confusion can emerge at any time and may not even emerge until late adolescence or early adulthood. A longitudinal research design would be required to trace development along the identity vs. identity confusion dimension.

Presentation: A fairly detailed exposition of Erikson's theory of identity formation is presented in Part I. An attempt is also made to integrate various other theoretical contributions on identity development, and to examine the theoretical implications of Erikson's developmental model in greater detail. Empirical studies on Erikson's concept of identity are reviewed in Part II. The research design and a description of the measuring instruments are also included in Part II. The results are presented and discussed in Part III.

PART I:

THEORETICAL FRAMEWORK

Erik H. Erikson's concept of identity and his theoretical formulations concerning adolescent development have evolved over at least three decades resulting in his book Identity: Youth and Crisis in 1968. 'Identity' received publicity with the appearance of his first book, Childhood and Society, in 1950. Since then 'identity' and 'identity crisis' have been applied to all manner of phenomena in all manner of contexts. As Erikson himself points out:

"'Identity' and 'identity crisis' have in popular and scientific usage become terms which alternately circumscribe something so large and so seemingly self-evident that to demand a definition would almost seem petty, while at other times they designate something made so narrow for the purposes of measurement that the over-all meaning is lost." (1968, p. 15).

What are we dealing with? Is 'identity' a useful theoretical concept or is it merely "the pet subject of the amerikanische populaerpsychologie" as a German reviewer of one of Erikson's books called it? That 'identity' is 'so seemingly self-evident' and the fact that it defies definition are probably some of the reasons for its widespread misuse and misinterpretation, and this too makes the scientifically-oriented research worker sceptical of its validity. One also tends to overlook the painstaking and detailed observations over many years on which he based his concept and theoretical formulations.

That Erikson entitled his first major theoretical article on the concept of identity "The Problem of Ego Identity" was most apt, and it still remains a 'problem' today for the research investigator. If we are to understand the concept correctly in all its complexity

and not fall into the trap of defining it too narrowly for the purposes of measurement, we must first consider its historical development. When did Erikson first use the concept of identity and why? What are the empirical foundations on which his theoretical formulations rest? These questions must be answered in order to judge whether his concept seems to be valid theoretically and empirically useful.

Erikson himself is not very helpful in providing an answer to the first question posed above. In 1956 he said about the term 'ego identity':

"My use of this term reflected the dilemma of a psychoanalyst who was led to a new concept not by theoretical preoccupation but rather through the expansion of his clinical awareness to other fields (social anthropology and comparative education) and through the expectation that such an expansion would, in turn, profit clinical work." (Reprinted 1959, p.101.)

And in 1968 he said:

"The term 'identity crisis' was first used, if I remember correctly, for a specific clinical purpose in the Mt. Zion Veterans' Rehabilitation Clinic during the Second World War..... Most of our patients, so we concluded at that time, had neither been 'shell-shocked' nor become malingerers, but had through the exigencies of war lost a sense of personal sameness and historical continuity. They were impaired in that central control over themselves for which, in the psychoanalytic scheme, only the 'inner agency' of the ego could be held responsible. Therefore, I spoke of a loss of 'ego identity.'" * (1968, p.17)

The term 'identity' seems to have first appeared in print in 1940 in an article he wrote for doctors entitled "Problems of Infancy and Early Childhood" (Coles, 1970, p.82), and it was explained for the first time in 1946 in "Ego Development and Historical Change" (reprinted 1959). But in reading through these articles and the

* The same origin is implied in Childhood and Society, 1965, p.37.

above quotations one is still not satisfied: there is no clear connection between his work in social anthropology and comparative education on the one hand and his clinical work on the other. But more important, how did he come to the conclusion that "identity versus identity confusion" is the normative crisis of the adolescent period?

In order to understand more fully the development of the concept of identity and its place in the life cycle (as well as its meaning) one has to take into account the development of Erikson's overall theory of human development which means that one has to study his life and work history. This will be presented as briefly as possible with an emphasis on those aspects of his life and work and on those ideas which were felt to be relevant to the development of his concept of identity.

1. Historical Perspective. *

Early Life: Erikson was born in 1902 in Germany but his parents were Danish and had separated before his birth. Thus he never knew his real father. His mother was of Jewish ancestry and she remarried a German Jewish pediatrician, Dr. Homburger. Erikson seems to have spent a comfortable and settled childhood, and he attended a classical Gymnasium (high school) where he studied Greek,

* Robert Coles (1970) has written an extensive history of Erikson's life and work. His book also contains a complete bibliography of all Erikson's published work and his major unpublished papers. For the most part this section is based on Coles's work, and specific references for Erikson's articles mentioned here can be found in Coles's book.

Latin, German literature, ancient history and art among other subjects. He excelled in the latter two subjects and initially settled on art teaching as a career. He has remained interested in history throughout his life.

His adolescence was not without its 'identity crisis' which was aggravated by rather incompatible group loyalties. He took a long time to resolve this crisis and wandered around Europe for several years. By the age of twenty-five he was back in his home town and apparently settling down when he received a letter from a friend, Peter Blos, suggesting that he go to Vienna to help him start a school for the children of the psychoanalytic community there. This school was the idea of Mrs. Burlingham (an American patient of Freud's who had children whom she wanted educated) and Anna Freud who was becoming increasingly interested in studying childhood itself.

Thus in 1927 Erikson went to Vienna and became absorbed in his teaching in this very progressive school. He was analysed by Anna Freud and eventually began to take theoretical courses in psychoanalysis with Aichhorn, Bibring, Helene Deutsch, Hartmann and Kris. But at the same time he also attended courses with the Montessori group in Vienna. In 1933 the school had to close and Erikson 'graduated' from the Vienna Psychoanalytic Society as a child and adult analyst. The Eriksons moved to Denmark for the summer where they thought of settling, and then to America at the end of 1933.

Erikson's interests in art and history are evident in all his later work (the former in his style of presentation and in the nature of some of his observations). Furthermore he seems to have been more concerned with the normal than with the abnormal, and he was interested in children and education. His first publication in 1930 was entitled "Psychoanalysis and the Future of Education". Strange political events were taking place, especially in his native Germany, which had led to the dissolution of the Vienna psychoanalytic community. He translated into English the first draft of "Hitler's Imagery and German Youth" (finally published in 1942) on the ship going to America.

He entered the psychoanalytic world during the third phase (the ego phase) of its development according to David Rappaport's historical analysis (in Erikson, 1959). This began with Freud's publication of The Ego and the Id in 1923 and ended with Anna Freud's The Ego and the Mechanisms of Defence in 1936. Ego psychology has its roots in this period and Erikson studied under Hartmann, who published Ego Psychology and the Problem of Adaption in 1939, and also with Ernst Kris.

Building a new point of view: Erikson settled in Boston where he was the only child psychoanalyst. In his private practice he saw upper-middle class American children, but he also held posts at the Harvard Medical School and the Massachusetts General Hospital, and he was a consultant at the Judge Baker Guidance Centre for emotionally disturbed children. In this latter institution he saw lower class pre-adolescent delinquents. He met Henry Murray and

became associated with the Harvard Psychological Clinic, and he also met social anthropologists, Margaret Mead, Gregory Bateson, Ruth Benedict and Scudder McKeel, who influenced his thought quite considerably.

His interest in youth led to his first research project (1934 - 1936) with Harvard medical students. He decided to try the play technique used with children and asked his subjects to produce a 'dramatic scene' with toys and blocks, etc. He found that most of the scenes represented accidents, and he concluded: "... we find a product of traumatic tension; instead of tragedy we find accident." (Coles, 1970, p.35). He explained the results in terms of ego psychology, and not in terms of instinctual id drives and the unconscious.

In 1936 he moved to New Haven to a post at Yale University in the Institute of Human Relations. He worked with troubled children, and he was able to observe the development of normal infants being studied at Yale. In 1938 he visited the Sioux Indians in South Dakota with Scudder McKeel. Coles considers that this visit was a decisive influence on Erikson's thinking:

"(It) marked the beginning of a life-long effort to demonstrate how the events of childhood are affected by the inevitable encounter with a given society, whose customs affect the way mothers hold and feed infants, and later on bring them up to behave." (Coles, 1970, p.37).

He found that in order to understand the Sioux he had to study their customs and history. In 1939 "Observations on Sioux Education" was published.

In this same year the Eriksons moved to California where they remained for the next decade. He resumed psychoanalytic work with children in San Francisco, and at Berkeley he took up his interest in anthropology and history. At the Institute of Child Welfare at the university he studied the play configurations of boys and girls taking part in the longitudinal developmental study in progress at the time. Soon after his arrival Erikson went to visit the Yurok Indians with Alfred Kroeber.

At the beginning of the war Erikson took part in several war-time research projects for the government which resulted in four unpublished papers. Later he became involved in treating war casualties and this was where he first used the terms 'ego identity' and 'identity crisis'. But the term 'identity' was used slightly earlier in an article in 1940 as we have already noted:

"Small differences, jealously guarded, preserve the virtues and the latent panic of generations, classes, and nations: they are symbols of status, of identity, and to many, especially in times of change in the structure of society, identity becomes as important as food, security and sexual satisfaction." (From "Problems of Infancy and Early Childhood", quoted in Coles, 1970, p. 82.)

This article (reprinted in 1954) outlined some of Erikson's basic theoretical principles such as the epigenetic principle derived from embryology, the biological basis of behaviour, and what he called here the principle of 'social relativity', i.e., that individual behaviour ("ego organization") can only be understood in relation to the individual's cultural milieu ("socio-economic organizations") and his physical development ("a 'mammalian organization' of organ systems"). He made it clear that he was interested in studying the

'whole child' and criticized those approaches which emphasized the pathological, "bundles of reflexes", or isolated segments of behaviour. He also made it clear that he wished to understand normal development as well as the abnormal.

He raised the question of when a behaviour pattern should be regarded as pathological and when it should not. He answered that it is the meaning of the behaviour "within this 'relativity' (the three organizing principles already mentioned) and not its 'cause' or 'effect' which should determine diagnosis and treatment". This orientation towards the meaning of behaviour patterns in terms of the individual's stage of development and his social milieu, instead of being content to label behaviour, is probably crucial in understanding why and how Erikson's ideas developed in the way they did.

His experience with primitive tribes was decisive in the development of his principle of 'social relativity'. He realized that child-training systems vary in different cultures and that they try "to create a human variation which seemed to be the optimum under the natural and historic conditions of the tribe. Thus, in simple cultures, training of the individual and preservation of the tribe appear to regulate one another automatically." (Erikson, 1954, p. 27).

It is against this background that we can understand how Erikson came to formulate his concept of 'identity'. He had to describe a group-psychological phenomenon which seemed to be crucial in understanding societal differences and the particular development of individuals within any given society, and which gives both the social group and the individual their distinctiveness and coherence. It

seems that he first conceptualized identity in relation to the social group (what he later called 'group identity') on the basis of his empirical observations of the Sioux and the Yurok Indians in particular. His experience with the war casualties then led to the formulation of 'ego identity' and 'identity crisis' but the elaboration of these concepts required further empirical evidence which he gathered from case history, life history, past and contemporary social history.

In "Hitler's Imagery and German Youth" (published in 1942) Erikson clarified his concept of identity and showed its relationship to adolescent development. His article on the Yurok Indians was finally published in 1943, and a subsequent article in 1945 contrasted the Sioux and the Yurok and white middle-class American children. This was important in the development of his theory of psychosocial stages and crises.

In 1946 "Ego Development and Historical Change" was published (reprinted 1959) which was Erikson's first systematic attempt to formulate theoretically his ideas about ego development, identity, the relationship between his ideas and psychoanalytic theory, and the influence of social and historical changes on the individual. He stressed that 'social factors' cannot simply be "shunted off" and regarded only as restrictive influences on the individual's ego and id-impulse expression (which was the trend in psychoanalytic theory). Ego psychology, he said, can only describe human development adequately if it takes into account the origin and development of the ego in organized social life, which is why his concept of

identity is so important and is central to his whole theory of psychosocial development: it links the 'social organization' with individual 'ego organization'.

This article was also important because it introduced the concept of 'ego strength'. " all of Erikson's subsequent work centres on the social and historical forces that make for the ego's weakness and its strength" (Coles, 1970, p. 105). A critical point in Erikson's intellectual development had been reached, and in 1950 Childhood and Society co-ordinated all his previous work and provided a detailed theory of ego development in childhood as well as a theoretical framework for understanding the whole life cycle from birth to death. Some of Erikson's most important contributions to psychology are his analysis of psychosocial ego development (in contrast to traditional psychoanalytic concern with psychosexual development) and the extension of this analysis beyond adolescence and physical maturity.

Development of the concept of identity and the historical method:

In 1950 Erikson resigned from Berkeley and moved to the Austen Riggs Centre in Massachusetts. Here he saw mainly adolescent patients from the upper-middle class. However, he also commuted to the University of Pittsburgh's Western Psychiatric Clinic where he saw lower class adolescents and young adults. He continued to see children and their mothers at the Arsenal Health Centre, but his main interest was shifting from childhood to adolescence, from social anthropology to social history. He realized that psychoanalysis required a more comprehensive theoretical framework to account for the complexities of adolescent development.

He elaborated his ideas on the life cycle for a White House Conference in 1950 (reprinted 1959) and it is only in terms of the life cycle that adolescent development can be understood. He observed his patients carefully; delivered a number of papers on identity; and studied Freud's life history and letters and George Bernard Shaw's biography. "The Problem of Ego Identity" in 1956 (reprinted 1959) was based on this work and gave a fairly detailed theoretical formulation of the development of a sense of identity in adolescence. It is perhaps the most important single article on the subject, and it raised many important issues.

His subsequent work on identity has been mainly concerned with applying his insights to various problems such as totalitarianism, delinquency, youth, racial problems, womanhood. He has also made detailed studies of the lives of two great historical figures: Luther (1958) and Gandhi (1969). The former is a study of the interaction between identity formation and ideology, and the latter is subtitled "^{Or} The Origins of Militant Nonviolence". Erikson's historical studies and his articles over the past decade (while at Harvard) reflect an increasing concern with contemporary social problems, and they attempt to throw new light on these problems by analysing them in terms of his theory of identity, which in turn has contributed to our understanding of identity formation. However, he has also been concerned with psychoanalysis and clinical work itself and with the vexing ethical problems involved in it, which led to the publication of Insight and Responsibility in 1964.

It was only in 1968 that he attempted to co-ordinate what he had written on identity over two decades in Identity: Youth and Crisis.

It is a revision of all his major articles on identity and contains very little that is absolutely new. Terminology has been revised especially in the Chart, and he attempts to formulate systematically, the development of identity in childhood. He published the book for several reasons:

"For one thing, single essays and papers are always ahead of themselves in suggestiveness and behind in firmness of established ground. Not until one tries to make a book of them can one really know what each meant to deal with, and what they gradually have come to mean together. And finally, to write or to have written about identity presents a special object lesson to the writer on human development: he cannot escape the necessity of re-evaluating his own thinking in the light of acute historical change." (Erikson, 1968, p. 11.)

"For whereas twenty years ago we gingerly suggested that some young people might be suffering from a more or less unconscious identity conflict, a certain type today tells us in no uncertain terms, and with the dramatic outer display of what we once considered to be inner secrets, that yes, indeed, they have an identity conflict ..."
(1968, p. 26.)

The past decade has seen a large number of articles published on identity by psychoanalysts, psychiatrists, clinical and social psychologists. Some of these have contributed additional insights to our understanding of the problems of identity while others have provided additional empirical support for Erikson's theory (case histories and studies of identity problems in various minority groups). Traditional research by 'academic' psychologists who have tried to measure identity has been too narrow on the whole and has not contributed very much to the 'scientific' verification of Erikson's theory. There have been very few publications which seriously contest or criticise the theory.

This section has attempted to show how and why Erikson came to use the concept of identity and to indicate the wide-ranging empirical

observations on which his theoretical formulations are based. Some of his main ideas and principles have also been outlined. Erikson's concept of identity is the cornerstone of most of his work, and no doubt identity problems have been a major source of anxiety in his personal life. He admitted to Coles: "So, it is true, I had to try and make a style out of marginality and a concept out of identity-confusion." (Quoted in Coles, 1970, p. 181).

2. Definition of Terms and Some Theoretical Issues.

Although Erikson's concept of identity cannot be defined precisely he does offer some fairly definitive descriptions of the different aspects of identity. Firstly, however, it is useful to understand why he uses the term sense of (identity, trust, autonomy, etc.): it is to indicate that the quality "pervades surface and depth, consciousness and unconsciousness. They are, then, at the same time, ways of experiencing accessible to introspection; ways of behaving, observable by others; and unconscious inner states determinable by test and analysis." (1965, p. 234).

Group identity refers to "a group's basic ways of organizing experience". It consists of the group's behavioural standards, mores, traditions and group stereotypes of good and evil which are based on its historical and geographic perspectives (collective space-time) and on its economic goals and technological means (collective life plan). The group identity maintains a reasonably coherent and productive society. Child-training methods aim (unconsciously) to bring up individual members so that they will fit into the group and affirm the group identity while at the same time their individual identities are affirmed by the group. The group identity and child-training methods are only successful insofar as they help most of the growing group members to overcome their individual developmental conflicts successfully. Thus there is a constant interaction and mutual influence between the group identity and individual identities.

As regards the individual's sense of identity Erikson initially differentiated between personal identity and ego identity:

"The conscious feeling of having a personal identity is based on two simultaneous observations: the perception of the selfsameness and continuity of one's existence in time and space and the perception of the fact that others recognize one's sameness and continuity.

What I have called ego identity, however, concerns more than the mere fact of existence; it is, as it were, the ego quality of this existence. Ego identity, then, in its subjective aspect, is the awareness of the fact that there is a selfsameness and continuity to the ego's synthesizing methods, the style of one's individuality, and that this style coincides with the sameness and continuity of one's meaning for significant others in the immediate community."

(1968, p. 50.)

Personal identity in this sense seems to be the same as the earlier use of the term identity by William James in 1890, and its use in medicine and in philosophy (De Levita, 1966). It reflects the ability to say "I" and the feeling that 'I am the same person that I was yesterday and that I will be the same person tomorrow; that I always have been the same person and always will be.' Disturbance in the sense of personal identity is manifest only in extreme psychotic cases. The concept of ego identity, on the other hand, is concerned with the individual's personality or character, 'the style of one's individuality'. Both types of identity must be recognized and affirmed by others (James was the first to recognize the importance of social relations in the feeling of identity).

Later Erikson differentiated between ego-identity and self-identity, but first it is necessary to clarify what Erikson means by 'ego' and 'self' as the latter term has a wide variety of meanings in the psychological literature.

Erikson adopts Hartmann's definition of the 'self'. Hartmann differentiates between 'self-representation' or self-image and 'object representation'. This concept of the self is essentially passive (in contrast to the concepts of Jung or Rogers for instance). The "I" is all-conscious.

"What the 'I' reflects on when it sees or contemplates the body, the personality, and the roles to which it is attached for life are the various selves which make up our composite Self."
(Erikson, 1968, p. 217).

The counterplayers of the 'selves' are the 'others' and the 'I' continually compares the 'selves' with various 'others'.

While the 'selves' are mostly pre-conscious, the 'ego' is unconscious:

"we become aware of its work, but never of it". Erikson defines the ego as:

"an inner 'agency' safeguarding our coherent existence by screening and synthesizing, in any series of moments, all the impressions, emotions, memories, and impulses which try to enter our thought and demand our action, and which would tear us apart if unsorted and unmanaged by a slowly grown and reliably watchful screening system." (1968, p. 218).

Cognition, perception and motility are functions of the ego, which tests reality, differentiates and co-ordinates our experience, thoughts and actions. It also synthesizes the 'selves' which form the composite Self.

Erikson follows Hartmann's suggestion that the word 'ego' should not be used when "the self as object of the 'I'" is meant. Thus 'ego-ideal' should become 'ideal self' because it is an image of what the 'I' would like the self to be, and 'self-identity' rather than ego identity should be used when we mean that "the 'I' perceives its selves as continuous in time and uniform in substance".

"... self-identity emerges from experiences in which temporarily confused selves are successfully reintegrated in an ensemble of roles which also secure social recognition ...

"Ego-Identity, then, is the result of the synthesizing function on one of the ego's frontiers, namely, that 'environment' which is social reality as transmitted to the child during successive childhood crises. Identity, in this connection, has a claim to recognition as the adolescent ego's most important accomplishment in that it helps simultaneously in the containing of the post-pubertal id and in the balancing of the then newly invoked superego as well as the appeasing of the often rather lofty ego ideal - all in the light of a foreseeable future structured by an ideological world image. One can then speak of ego identity when one discusses the ego's synthesizing power in the light of its central psychosocial function, and of self-identity when the integration of the individual's self-and role-images are under discussion." (1968, p. 211).

The individual's sense of identity involves both self-identity and ego-identity. Much of the current misuse and misunderstanding of Erikson's concept of identity seems to stem from a focus on self-identity (roles, self-concept, self-acceptance) while ego-identity has been disregarded. This has been especially the case in much of the research which has attempted to 'measure' identity but it is also the case in many other writings on identity (Strauss, 1959; De Levita, 1966; Lynd, 1961 and others). Ego-identity is more obscure and less readily measured or understood than self-identity. For these reasons it is important that these two aspects of identity be clarified.

Schneiders (1963) defined self-identity in the following way:

"It means a clear awareness of one's role and status in life, one's goals and purposes, and one's relationships to reality, to society, and to a Supreme Being." (p. 139).

He considers that the body-image and sexual identity are the "hard core of self-identity". De Levita (1966) emphasizes roles ("I shall define ... identity as the cluster of roles one is enacting"),

and adds that the body-image, our name, and life history (as perceived by the self) are important identity-elements. One's 'philosophy of life' or conscious ideological convictions would also be aspects of self-identity.

Ego-identity becomes more meaningful when it is considered in relation to the psychoanalytic concept of 'character' as formulated by Peter Blos (1968). He contends that character formation is the essential task of late adolescence. Blos sees character formation as an ego process which strengthens the ego and frees psychic energy. An individual's character is his 'style of life', his habitual way of organizing experience and coping with internal conflicts and with the external world. According to Blos, the content and pattern of character are socially determined but "it is only internalization that renders the psychic organism greatly independent from those forces which brought it into existence." (p. 261). He defines the function of character as:

"the maintenance of psychosomatic homeostasis, in patterned self-esteem regulation (A Reich, 1958), in the stabilization of ego identity (Erikson, 1956), and in the automatization of threshold and barrier levels, both shifting in accordance with the intensity of internal or external stimuli. This regulatory function includes the containment of affective fluctuations within a tolerable range, including depression, as a major determinant in character formation (Zetzel, 1964)." (p. 249 - 250)

'The essential feature of character formation is that it establishes secondary ego autonomy and a stable, more or less permanent ego-synthesis. Thus the ego no longer needs to depend on identifications with others in order to cope with id impulses and with the environment. This can only take place in adolescence, as a result

of genital maturation and cognitive development ('formal operations') and after dependency ties with the family have been broken (what Blois calls the 'second individuation process').

What is discerned as character in children, according to Blois, is a "mere bundling together of traits, attitudes, habits and idiosyncracies" which are "stabilized by identifications". In character formation, on the other hand, "integrative processes, structurings and patternings that belong to a different order" are involved (cf. Piaget with regard to cognitive functioning). "Character traits, then, are not identical with character per se, nor is character the sum total of character traits." * (cf. Erikson's statement that identity is more than the sum of its parts, 1968, p. 158). Adequate character formation puts the maximum amount of psychic energy at the disposal of the ego and allows for the unfolding of man's potentials. It is the condition of his freedom according to Blois.

"Character formation establishes new invariants in the psychic life, and thus heightens and stabilizes the experience of the self. This, essentially identical, experience was derived in childhood from the invariants - reliability and sameness - of the environment. Character structure renders the psychic organism less vulnerable than it had ever been before, and the maintenance of this structure is secured against any interference from any quarter, internal or external. If must be, one dies before letting it die." (Blois, 1968, p. 260).

Erikson's concept of identity formation can be regarded as the psychosocial aspect of character formation. Both identity and

*Character traits (e.g. oral and anal traits) have their origin in the various levels of psychosexual development and seem to be relatively specific responses to particular stimuli or threats to the ego. If they are properly integrated by the ego during adolescence they lose their 'erotic bonds' (cathexis) and become more generalized.

character are the results of ego integration, but character formation involves synthesis on all the ego's frontiers: id, superego and 'environment', while identity formation is concerned with ego synthesis on the latter frontier (the social environment).

Blos tends to emphasize the psychosexual and intrapsychic aspects of character formation, although the psychosexual and psychosocial aspects of development are thoroughly interdependent as Erikson takes pains to show in Part I of Childhood and Society (1965).

Erikson does not, however, spell out the psychosexual and intrapsychic aspects of development in adolescence, although he recognizes their importance:

"It is the ego's function to integrate the psychosexual and the psychosocial aspects on a given level of development and at the same time to integrate the relation of newly added identity elements with those already in existence From a genetic point of view, then, the process of identity formation emerges as an evolving configuration - a configuration which is gradually established by successive ego syntheses and resyntheses throughout childhood. It is a configuration of gradually integrating constitutional givens, idiosyncratic libidinal needs, favoured capacities, significant identifications, effective defenses, successful sublimations, and consistent roles." (1968 p. 162 - 163).

The above quotation is rather ambiguous as it almost suggests that identity formation encompasses psychosexual development (and therefore would be the same as Blos's concept of character formation).

On the whole, however, Erikson deals with psychosocial and interpersonal development in adolescence while Blos deals with psychosexual and intrapsychic development. Their theories complement each other (overlapping in a certain degree) and, together with Piaget's theory of cognitive development, provide a more comprehensive framework for understanding the dynamics of adolescent development than any one contribution provides on its own.

Several other terms remain to be clarified at this stage. Initially Erikson used the term identity diffusion to describe the outcome of a failure to resolve the identity crisis. This term has a strictly spatial connotation, "a centripetal distribution of elements from a centre of origin" and does not imply anything disorderly or confused. Erikson meant to imply by the term identity diffusion "a split of self-images a loss of centre and a dispersion" and so he has replaced it with the term identity confusion (1968). He emphasizes, however, that the state of identity confusion should be regarded as a continuum with 'mild' confusion at one end and 'aggravated' or 'malignant' confusion at the other end. *

This idea of a continuum applies to all the psychosocial conflicts which he defines in terms of the opposing 'states' involved in each conflict at each stage (e.g. 'a sense of identity versus identity confusion'). He does not mean an 'all-or-nothing success scale' but rather that in the resolution of each conflict a balance must be established so that either the positive (healthy) aspect or the negative (unhealthy) aspect will predominate in the psyche. These resolutions are not permanent either and the individual is always subject to fluctuations in these states.

Erikson uses the terms 'nuclear conflict' and 'psychosocial crisis' interchangeably. The term crisis is used in the sense of a turning point in the individual's development, and does not necessarily mean

* In this study the term 'identity confusion' will be used unless reference is being made to Erikson's earlier writings or to research based on his earlier writings. 'Identity confusion' and 'identity diffusion' should be regarded as synonymous.

a traumatic experience, although any of the conflicts may reach traumatic proportions in particular lives. Green ** criticizes the use of the term 'crisis' because of its 'life-or-death' connotation.

** M. R. Green discusses "The Eight Ages of Man" (from Childhood and Society, 2nd Ed., 1963) published in the International Journal of Psychiatry, 1966, 2 (3), p. 281 - 307.

3. The Life Cycle and the Epigenesis of Identity.

The life cycle consists of eight developmental stages from birth until death. The first five stages correspond with Freud's five psychosexual stages. Erikson's developmental scheme is based on his principle of 'relativity' and on the epigenetic principle. Briefly, this principle states that all the individual's developmental potentialities exist at the beginning (in infancy) in some rudimentary form and each develops at a particular rate becoming differentiated at a particular 'critical' stage. Normal development depends on the proper rate and sequence of development, and a disturbance in this proper rate or sequence will cause a disturbance in all subsequent development. Thus each stage and each developmental crisis is systematically related to all others and all potentialities develop all the time.

Erikson takes into consideration the following factors when discussing ego development through the life cycle:

"(1) the expanding libidinal needs of the developing being and, with them, new possibilities of satisfaction, of frustration, and of 'sublimation'. (2) The widening social radius, i.e., the number and kinds of people to whom he can respond meaningfully on the basis of (3) his ever more highly differentiated capacities. (4) the developmental crisis evoked by the necessity to manage new encounters within a given time allowance. (5) A new sense of estrangement awakened along with the awareness of new dependencies and new familiarities (a sense of division or alienation). (6) A specifically new psychosocial strength ... which is the foundation for all future strengths..... (7) the contribution of each stage to one major human endeavour (social institution) which in adulthood takes over the guardianship of the particular strength originating in this stage and the ritual appeasement of its particular estrangement." (1968, p. 104 - 105).

(8) With the positive resolution of each psychosocial conflict the ego develops a related virtue or strength (e.g., hope with trust).

The life cycle will be presented here from the psychosocial point of view with the emphasis on each stage's contribution to identity formation in the individual. Each social institution (point 7) contributes to the overall group identity.

Stage I: A sense of basic trust versus basic mistrust:

When the infant becomes able to distinguish between himself and others, the original feeling of unity with ^{the} maternal matrix is destroyed. This arouses the first sense of estrangement in the infantile ego resulting in a fear of abandonment and a continuing nostalgia for a "lost paradise". The sense of basic trust is based on the feeling that other people can be trusted to satisfy one's needs "as well as a fundamental sense of one's own trustworthiness" (the beginnings of self-esteem). Basic mistrust is characterized by suspiciousness and withdrawal from what is felt to be a hostile world, as well as a feeling that one is unlovable and untrustworthy in oneself.

The earliest and most undifferentiated 'sense of identity' which forms during the first year of life "arises out of the encounter of maternal person and small infant, an encounter which is one of mutual trustworthiness and mutual recognition." (1968, p. 105). What needs to be established here is a feeling of 'personal identity' which must be based on an adequate differentiation of the self from others.

The infant's experience of inner sameness and continuity is probably based on the recognition of the sameness and continuity of the maternal person (and the environment) and on the perception that the mother recognizes him as being the same and continuous in time and space.

R. D. Laing's analysis of the development of a sense of 'being' (which is the same as a sense of self or a sense of personal identity in his terminology) is useful here:

"The mother, however, is not simply a thing which the child can see, but a person who sees the child. Therefore, we suggest that the necessary component in the development of the self is the experience of oneself as a person under the loving eye of the mother" - esse is percipi. (1965, p. 116).

Therefore disruptions or discontinuities in the mother-child relationship will disturb this growing sense of personal identity.

The persistent 'disappearing-and-appearing' games which very young children enjoy, and the establishment of 'object constancy' which Piaget describes, are important processes in initial identity formation, as well as the experience of the body which is enhanced by maternal handling and fondling. Autistic isolation results if this early sense of identity is not established. Mutual recognition affirms one's sense of identity and it remains an essential prerequisite of identity formation throughout life. The vital ego strengths of hope and faith which derive from a sense

of basic trust are also important for later identity development.

"The shortest formulation of the identity gain of earliest childhood may well be: I am what hope I have and give." (1968, p. 107).

Stage II: A sense of autonomy versus shame and doubt: During the second and third years of life the child becomes able to exercise some control over himself, his bodily functions and his environment. Symbiotic ties with the mother must be broken so that a sense of autonomy can be established. This is characterized by a feeling of self-control and a sense of independence from others. The sense of estrangement of this stage is between the self (ego) and bodily impulses (id) resulting in a fear of exposure through the loss of self-control. Shame is characterized by the experience of premature (bodily) exposure while doubt concerns one's ability to exercise self-control and cope with life without the help of others. Disturbance in the development of a sense of autonomy can give rise to compulsive methods of maintaining control, self-restraint or meek compliance on the one hand, or to destructiveness or hostile rebellion on the other. This stage is the ontogenetic source of 'free will'.

The contribution to identity formation is the will to be oneself:

"I am what I can will freely". The feeling of a personal identity is consolidated. Hayman (1965) suggests that the development of secondary process speaking ('verbalization', i.e., speech that is used for the purpose of communication), which occurs during this stage, is closely related to the consolidation of personal identity. She concludes that the ability to verbalize allows the individual to differentiate adequately between himself and others. Her

hypothesis is based on the analysis of two young women manifesting severe identity confusion and severe verbalization disturbances.

Various identity elements such as manner of speaking and character traits develop at this stage. The sense of autonomy is a very important aspect of identity formation and in adolescence the need to emancipate oneself from one's childhood and establish one's independence from the family is almost a repetition of this earlier emancipation from the mother. " the very courage to be an independent individual who can choose and guide his own future" derives from a healthy sense of autonomy.

The danger to identity formation is self-doubt which may, in adolescence, be denied by overcompensatory acting-out or "shameless defiance" or messiness and swearing. On the other hand, a shaky sense of autonomy may result in premature character (and identity) consolidation of the defensive compulsive or obsessive type which is rigid and restricted and characterized by submission to authority or conformity. In adolescence the compulsive person may attempt to free himself by trying to 'get away' with things but he will be habitually ashamed and afraid to be seen.

Stage III: A sense of initiative versus guilt: During the play age increasing physical co-ordination, linguistic skill, imagination and curiosity open up new horizons. The development of the superego divides the psyche within itself, and the child's sense of initiative is threatened by a severe and restrictive superego. He may come to feel guilty about anything which he plans or imagines he can do, unless his initiative is channelled into acceptable avenues of action so that he gains a realistic sense of ambition and purpose.

"Being firmly convinced that he is a person on his own, the child must now find out what kind of a person he may become." In his play the child practises and explores many adult roles. The contribution to identity formation at this stage is the anticipation of roles: "I am what I can imagine I will be." He is strongly identified with his parents and forms his basic sex-role identity. Parental images of good and evil, of what their child should or might become (positive identity) in contrast to what he should not become (negative identity), are transmitted to the child and greatly influence his identity formation. A study by Gregor & McPherson (1966) of White and African children in South Africa (using the doll test) found that by the age of five children are aware of racial differences and the value stereotypes associated with skin colour (i.e., 'white' is good, 'black' is bad).

If the child's sense of initiative and imagination is restricted by a sense of guilt he will suffer role inhibition and a severe restriction of his identity potential. Identity formation may be foreclosed in order to ward off guilt feelings. This usually manifests itself later in hysterical denial or self-restrictiveness. It may be overcompensated for in a show of 'tireless initiative' (what Erikson describes as 'go-at-iveness'). These people are always 'on the go' and never stop to think in case they are overwhelmed with guilt feelings. Guilt may also be assuaged by submission to a higher authority which sanctions aggressive initiative by making goals of conquest seem both impersonal and glorious (hence man's vulnerability to totalitarian systems). Destructive adolescent gangs may be a response to the frustration of initiative.

Stage IV: A sense of industry versus inferiority: During latency the child's energy is directed towards cognitive, athletic and social pursuits. He seeks to master the skills valued by his culture so that one day he will become a useful and productive member of his society. The feeling of being able to make things and make them well results in a sense of industry and a feeling of competence. The child who fails to secure recognition and approval for his work efforts becomes alienated from the world of work and technical skills and develops a sense of inferiority. It is suggested that the fear of failure derives from this stage.

Identity formation in this stage involves identification with tasks and work: "I am what I can learn to make work". The danger to identity formation is the acceptance of work as the only criterion of worthwhileness so that the individual becomes a slave of the dominant technology and his identity is defined solely by his occupational role. (resulting in a foreclosure of identity formation). Erikson suggests that "the majority of men have always consolidated their identity needs around their technical and occupational capacities" (1968, p. 128). Children who cannot identify with the world of work develop a sense of futility in technical skills and will be especially vulnerable to identity confusion in adolescence.

Stage V: A sense of identity versus identity confusion: Physical growth and sexual maturation, as well as the necessity to prepare for the responsibilities of adulthood ahead, disturb former feelings of sameness and continuity. A new ego-synthesis has to be achieved within the framework of the larger society (in contrast to the family

and school milieu of childhood). In order to make sense of the world which is now envisaged adolescents require an ideological (in the widest sense) frame of reference.

The identity elements which have accrued during the previous stages have to be integrated into a wider sense of identity. Thus the adolescent looks for men and ideas which he can trust and have faith in; he needs an opportunity to decide with a sense of free will on what he might become; he looks for peers and leaders who will give imaginative scope to his aspirations and initiative; and he looks for an occupation in which he can use his technical skills to the best of his ability. What is at issue in adolescent ^{identity} formation is not so much "Who am I?" but "What do I want to make of myself, and what do I have to work with?" (Erikson, 1968, p. 314). Thus he has to establish a continuity between what he was as a child and what he hopes to become in the future.

Adolescence is a period of experimentation, self-definition and ego re-organization. Self-definition can only occur in relation to others and adolescents are "sometimes morbidly, often curiously, preoccupied with what they appear to be in the eyes of others as compared to what they feel they are ..." (Erikson, 1968, p. 128). Identities are tested in peer groups which also help the adolescent sever his dependency ties with his family. A developing sense of identity has to be affirmed by others and can only be realized in society. Therefore adolescence is least 'stormy' in those young people who can 'fit into' their society without undue frustration and thus affirm the identity of the group which simultaneously affirms their own. A society whose promises to its children are not kept

will be rejected by its adolescents. Erikson notes that independence and initiative are freely granted to American children but in adolescence conformity and submission to the super-machines and big business organizations are demanded.

The sense of estrangement experienced by youth is between the self and society which produces a fear of isolation. Identity confusion is summed up by the following statement: "I just can't take hold, Mom, I can't take hold on some kind of life." (In Erikson, 1968, p. 131). It is avoided by submission to outside authorities (and exploited by totalitarian regimes), by conformity to the majority opinion and values, or by joining sub-cultural cliques which have clearly defined boundaries determining what is 'in' and what is 'out'. This is often a transitory phenomenon in adolescence. The various aspects of the identity conflict and the actual process of identity formation will be discussed in greater detail in the next sections. Adolescence lays the foundation for adult development and identity formation continues throughout adulthood.

Stage VI: A sense of intimacy versus isolation: Young adults faced with making commitments 'for life' in work, in love and marriage, and perhaps to their country (military service) face the severest test to their identities. Only a relatively strong sense of identity can risk being shared with another or temporarily 'abandoned' in sexual intimacy or intellectual inspiration, or risk being challenged in competition. A fear of commitment may result so that the individual distantiates himself from others and repudiates those forces, people or ideas which are perceived as a threat. A sense of isolation develops. The ability to love is the ego strength

derived from a sense of intimacy, which enriches identity formation through being able to share one's experience with another:

"We are what we love."

Stage VII: A sense of generativity versus stagnation: Once commitments have been made and intimacy established, adults need to realize their identities in productive or creative work, and in caring for and guiding the next generation. Where this cannot be achieved a sense of stagnation and personal impoverishment results. Identity formation is very much dependent on the interaction between the generations: just as growing children need to identify with the identities of their parents, parents need to 'identify' with their growing children in order to have their own identities affirmed and enriched. However, the child's developing identity may threaten or even negate the identity of one or both his parents. Searles (1966) analyses identity formation in this context based on psychoanalytic therapeutic work with schizophrenics. He points out how important it is for the young child's identity formation to be able to identify with "the parent's courage-to-be-an-individual".

Stage VIII: A sense of integrity versus despair: A sense of integrity 'transcends' identity and it is the heir of a strong sense of identity formed and realized throughout the life cycle. Wisdom is the virtue of old age. " ... healthy children will not fear life if their elders have integrity enough not to fear death". (Erikson, 1965, p. 261).

The Epigenetic Chart: The psychosocial conflicts which have been outlined here can be represented on a chart which is a useful guide

in any attempt to order and systematize Erikson's theoretical formulations. " ... the chart formalizes a progression through time (the vertical axis) of a differentiation of parts" (the horizontal axis). Therefore the major psychosocial conflicts are filled in along the diagonal of the chart; the identity developments in each stage may be filled in the appropriate blocks in the fifth column (the vertical); and the contribution of each stage to the identity conflict in adolescence may be filled in the appropriate blocks in row V (the horizontal).

EPIGENETIC CHART (REVISED - ERIKSON, 1968, p. 94)

VIII							INTEGRITY vs. DESPAIR	
VII						GENERATIVITY vs. STAGNATION		
VI					INTIMACY vs. ISOLATION			
V	Temporal Perspective vs. Time Confusion	Self-certainty vs. self- consciousness	Role Experi- mentation vs. Role Fixation	Apprentice- ship vs. Work Para- lysis	IDENTITY vs. IDENTITY CONFUSION	Sexual Polar- ization vs. Bisexual Confusion	Leader- and Followership vs. Authority Confusion	Ideological Commitment vs. Confusion of Values.
IV				INDUSTRY vs. INFERIOR- ITY	Task Identifi- cation vs. Sense of Futility			
III			INITIATIVE vs. GUILT		Anticipation of Roles vs. Role Inhibition.			
II		AUTONOMY vs. SHAME & DOUBT			Will to be One- self vs. self- doubt.			
I	BASIC TRUST vs. MISTRUST				Mutual Recogni- tion vs. Autist- ic Isolation			
	1.	2.	3.	4.	5.	6.	7.	8.

4. Adolescent Development: Various Aspects of the Identity Conflict.

In order to define the various aspects of the identity conflict during the adolescent stage, horizontal V of the epigenetic chart can be used as a guideline. It "contains the derivatives of earlier relative achievements which now become part and parcel of the struggle for identity." (Erikson, 1959, p. 141). The theoretical formulations implicit in this scheme are based on clinical observations of individuals manifesting severe identity confusion. It was only after Erikson had attempted to describe the 'syndrome' of identity confusion that he tried to fit his findings into the 'boxes' in the chart. The following section, then, will be primarily a discussion of the 'symptoms' of identity confusion but presented according to the logic of the chart.

V-1: Time perspective versus time confusion: The disturbance in the experience of time which Erikson found in his patients manifested itself in: a sense of great urgency together with a loss of perspective in the consideration of time as a dimension for living; simultaneous feelings of being very young (baby-like) and very old ("beyond rejuvenation"); "protests of missed greatness and of a premature and fatal loss of useful potentials"; and no hope that the future might bring change but, at the same time, a fear that it might. Some of his patients physically slowed up as if they were "moving in molasses".

The sense of time is a secondary (ego) process and derives from the infant's adaption to the initial cycles of need tension, delay of satisfaction, and satiation, and ^{it} is the prerequisite for the ego's

ability to delay gratification. A sense of identity in adolescence has to be oriented towards the future while it incorporates the past: it is a process of 'becoming' in a sense.

A time perspective allows the adolescent to set long-term goals which are felt to be sufficiently predictable to make waiting and 'working' worthwhile. Projection of the self into the future and the establishment of realistic goals is dependent, to a large extent, on the development of 'formal operations' (Piaget). A disturbance in the individual's time perspective will cause a disturbance in his feeling of continuity which is so vital to a sense of identity. History provides an overall temporal perspective and all ideologies promise a future.

V-2: Self-certainty versus self-consciousness: By self-consciousness Erikson seems to mean a painful awareness of the discrepancies between one's self-image and what one appears to be in the eyes of others, which can lead to a more serious total self-doubt (regression to the second stage). Self-doubt in adolescence is experienced as "a feeling that all that is now 'behind' in time - the childhood family as well as the earlier manifestations of one's personality - simply do not add up to the prerequisites for a new beginning." (1968, p. 112). It is a doubt in one's ability to cope with the world, which is now envisaged, as an independent person.

Self-consciousness also involves an awareness of being exposed and looked at by others, and hence the fear of being shamed in front of others. The experience of shame (analysed by Lynd, 1961) seems to involve the whole self and it tends to negate rather than affirm

identity. Self-consciousness and shame, however, have a rather ambiguous role in identity formation. Where one's sense of personal identity is in jeopardy (as in the schizoid) to be conscious of oneself and to be looked at by others assures one that one does exist (Laing, 1965). And it is only through the self-conscious comparison of oneself with others that one can establish a realistic self-concept. Lynd (1961) suggests, in a similar vein, that experiences of shame can provide insight into one's self and thus contribute to identity formation.

Self-certainty is characterized by "a definite sense of independence from the family as the matrix of self-images, and a sureness of anticipation" (1968, p. 183). This implies that the ego has to overcome infantile dependencies and establish secondary autonomy. Both the young child's and the adolescent's struggle for independence are characterized by rebelliousness and covert needs for guidance. Unfortunately, Erikson does not give the adolescent's struggle to overcome dependency needs and to establish his autonomy very much attention, and it is suggested that this struggle is of crucial importance for identity formation. It will be discussed in greater detail in the next section.

We have already mentioned how important the peer group is for the process of self-definition and in helping the adolescent to establish some sort of independence from the family. Adolescent cliques (and even schools) provide some form of uniformity (e.g. dress) in which a shaky self-certainty can find protection for a while in conformity to the group.

V-3: Role Experimentation versus Role Fixation:* Identity confusion is often manifested "in a scornful and snobbish hostility toward the roles offered as proper and desirable in one's family or immediate community. Life and strength seem to exist only where one is not, while decay and danger seem to threaten wherever one happens to be." (1968, p. 173). This particular 'symptom' is often seen in members of a minority group who reject their cultural heritage and strive to be like the prototype of the dominant culture. However, a disapproving superego (based on parental identifications) continually lets them know that their cherished 'new' identity is 'phony'. Sommers (1964) has done a considerable amount of therapeutic work with such cases and offers some useful insights into the nature of their identity problems.

The choice of a 'negative identity', i.e., "an identity perversely based on all those identifications and roles which, at critical stages of development, had been presented to them as most undesirable and dangerous" (1968, p. 174) is a defense against identity confusion when childhood role expectations cannot be integrated into a realistic sense of identity. Many desperate adolescents "would rather be nobody or somebody totally bad or, indeed, dead - and this by free choice - than be not-quite-somebody". (1968, p. 176).

* De Levita (1966) analyses the relationship of role behaviour to "the predictability of gratification". Where interpersonal mutuality (which is an important aspect of identity formation) breaks down the individual tends to fixate on those roles which will ensure gratification of his needs (such as social recognition and approval). Role rigidity becomes a defense against identity confusion: he dare not change his role behaviour lest he lose a sense of continuity and sameness.

The essential problem here is that the past is rejected creating a discontinuity in experience, and earlier identifications with parents must be denied which means that the superego remains inaccessible to ego control. Earlier Oedipal conflicts (with a latent death wish against the parents) are revived and the ensuing sense of guilt paralyzes all initiative and free role experimentation. The latter is a necessary prerequisite for the development of a sense of identity so that the individual can establish which roles are best suited to his abilities, initiative and personality and achieve an integration of these roles.

Adolescent subsocieties with their unwritten codes of conduct and the more formal school societies and committees provide opportunities for free role experimentation and the expression of initiative while at the same time guarding against a sense of guilt and postponing total commitments.

V-4: Apprenticeship versus work paralysis: Severe identity confusion was found to be accompanied by a disturbance in the individual's sense of industry, which was usually manifested in an inability to concentrate or "in a self-destructive pre-occupation with some one-sided activity, e.g., excessive reading." An excessive awareness as well as abhorrence of competition is another symptom (Oedipal rivalry is probably the antecedent according to Erikson). Work is an important refuge from infantile fantasy and vague anxiety, and when the ability to work is lost regression to infantile conflicts becomes easy. Work paralysis, however, does not usually reflect any real lack of potential.

All societies institutionalize some form of apprenticeship (which includes the development of intellectual skills) for adolescents which allows them, through experimental competition in work and play, "to find and insist upon (their) own kind of achievement and (their) work identity." Occupational identity is an important aspect of an overall sense of identity (especially for young men) and it is often the most significant overt problem which adolescents experience.

The 'symptoms' of identity confusion which have been discussed are seen in only a relatively small number of adolescents who experience 'aggravated' or 'malignant' identity confusion. They are described by Erikson as "the regressive trends in the identity crisis". Most adolescents will experience moments of time confusion, self-consciousness, role fixation and work paralysis. However, there are also aspects of identity formation which "anticipate future development".

V-6: Polarization of sexual differences versus bisexual confusion:

Throughout childhood appropriate sex-role behaviour is learned but it is only in adolescence, with the achievement of sexual maturity, that masculinity and femininity become crucial factors in identity formation. The establishment of sexual identity and the learning of appropriate hetero-sexual behaviour is governed, for the most part, by social mores and elaborate codes of conduct (e.g., the American teen-age dating system) which differ markedly between cultures, social classes, and even among various sub-cultures.

The influence of inappropriate childhood identifications on later sexual identity has been well documented. Young people who concentrate on social, artistic or intellectual pursuits in order to ward

off sexual impulses may also be attempting to ward off bisexual confusion resulting in "a permanent weakness of genital polarization with the other sex". On the other hand, "young people in confusion may foreclose their identity development by concentrating on early genital activity without intimacy" resulting in a split between sexuality and the rest of the personality. (Erikson, 1968, p. 186).

V-7: Leadership and followership versus authority confusion: Adult responsibility for guiding the next generation is anticipated in adolescence by learning to take leadership and assume followership among peers (e.g., on student councils). The structure of any social group depends on some sort of hierarchy of authority (even in delinquent gangs). The individual's place in the hierarchy contributes to and affirms his sense of identity. The hierarchy of authority obtains its validity from the ideological framework which supports it, and those youth who reject the prevailing ideology may find themselves in a position where they can neither lead nor obey voluntarily and therefore become isolated.

V-8: Ideological commitment versus confusion of values: The importance of a stable sense of values for identity formation is obvious: without it there is no basis for choice, judgement or for setting goals.

Every society presents a system of ideals to the young in the explicit or implicit form of an ideology. However, ideology is not merely one aspect of identity formation but it's important in the resolution

of all aspects of the identity conflict. Ideology offers youth:

" (1) a simplified perspective of the future which encompasses all foreseeable time and thus counteracts individual 'time confusion'; (2) some strongly felt correspondence between the inner world of ideals and evils and the social world with its goals and dangers; (3) an opportunity for exhibiting some uniformity of appearance and behaviour counteracting individual identity-consciousness; (4) inducement to a collective experimentation with roles and techniques which help overcome a sense of inhibition and personal guilt; (5) introduction into the ethos of the prevailing technology and thus into sanctioned and regulated competition; (6) a geographic-historical world image as a framework for the young individual's budding identity; (7) a rationale for a sexual way of life compatible with a convincing system of principles; and (8) submission to leaders who as superhuman figures or 'big brothers' are above the ambivalence of the parent-child relation." (1968, p. 187 - 188).

Ideology and identity are really two aspects of the same process: both provide the necessary condition for further human development, for that human solidarity which links "common identities in joint living, acting and creating". Where existing ideologies are no longer related to the concrete human condition, to the real range of alternatives for identity formation, it is the youth who are most seriously affected, and it is they who are most likely to protest, to reject the outworn ideologies which no longer fulfill their identity needs, and demand change. This in turn is likely to make those adults, who have based their identities on the old ideologies, feel threatened. It is only in these terms that the conflict between the generations can be understood, and also youth's vulnerability to totalitarian systems which exploit the fact that youth has been left 'high and dry'.

5. The Process of Identity Formation during the Adolescent Period. Identity formation proper begins at puberty when three developments provide new energy which make identity formation both possible and necessary: (1) physical growth, which can mean that new methods of coping with aggression have to be found; (2) sexual maturation means that new methods of coping with sexual impulses which will also allow for their gratification have to be found; and (3) cognitive development (Piaget's 'formal operations') makes it possible for the ego to achieve the complicated re-synthesis which is required.

Socially, puberty signifies the end of childhood and the adolescent is required to prepare for the responsibilities of adulthood ahead. Erikson suggests that the adolescent period is a psychosocial moratorium, that is, a period of delay between childhood and adulthood which grants the individual various opportunities for experimentation and preparation and which allows him to establish his own identity before facing the tasks and commitments of adulthood. All cultures institutionalize some period as a moratorium for the majority of their youth, and most of them provide more or less clearly defined rituals and confirmations which assist youth in making the transition from childhood to adulthood. This is more obvious in the puberty rites of primitive societies, but we have already noted how adolescent cliques and sub-societies as well as schools, colleges and churches help modern youth to establish their identities.

In most cases the process of identity formation is unconscious, and the moratorium is not experienced consciously as a period of experimentation (the young adolescent often feels deeply committed, especially in his 'love affairs'). In late adolescence a period of 'crisis' ensues which, hopefully, leads to commitments for life. It is at this time that identity conflicts are likely to become conscious: when the individual is just about to 'gain' an identity or be plunged into identity confusion.

It is difficult to determine when 'late adolescence' occurs and when the moratorium ends. The length of the moratorium varies in different cultures and in different social classes. Traditionally, the accepted upper boundary of the adolescent period is about 18 years when full sexual maturity is reached. However, in present-day Western societies the moratorium has been considerably extended in time because of the lengthy period of academic or technical training required for many occupations. In fact, adolescence has almost become an institutionalized stage of life: the teenage. While identity formation in modern society is a far more complicated matter than in primitive societies, some writers have suggested that this extended moratorium might be more harmful than beneficial, but we shall return to this later.

Erikson describes the various psychosocial aspects of the identity conflict (section 4) and he tends to focus on the ways in which social groups and institutions either help or hinder the young person in establishing his identity. He does not go into any detail concerning the actual inner ego developments or suggest any possible 'steps' or phases involved in identity development during the adolescent period. Other writers throw more light on this.

Blos (1968) focusses on the intrapsychic aspects of adolescent development and on character formation. He maintains that there are four major developmental tasks which the ego has to complete before character synthesis can take its course. These are relevant to identity formation in that they help one to understand the difficulties of the adolescent process especially as regards the establishment of secondary ego autonomy which is essential for the development of a sound ego identity.

Briefly the four developmental tasks are:

(1) The second individuation process involves the withdrawal of libidinal and aggressive cathexes from infantile love and hate 'objects', and the integration of the super-ego to form the ego-ideal. This emancipation from infantile bonds occurs when the ego finds new solutions to the early conflict situations which do not involve binding identifications and total repression of id impulses. This can only be achieved, according to Blos, by 'reliving' the pre-genital conflict situations. This apparent regression, therefore, is not pathological but necessary for further development to take place.

(2) Residual trauma. Blos assumes that all young children experience trauma and he contends that these traumatic experiences have permanent effects (the residue), such as special sensitivities to certain stimuli or specific fears, even when the underlying traumatic experiences have been worked through in therapy. The ego has two alternatives: it can either attempt to avoid situations which provoke the fear (residual trauma) resulting in inhibitions, phobias or compulsions, or it can come to terms with the residual trauma by accepting it as part of itself and developing automatic responses which keep the fear (residual trauma) within bounds. The latter is one function of character formation, and this coming to terms with 'residual trauma' is a developmental task of adolescence.

Blos is not clear as to whether the underlying traumatic experience has to be 'relived' or not. The important thing seems to be the confrontation by the ego of the effects of the original trauma so that these effects (e.g. a fear of the dark) become part of one's character which allows the ego to cope with the fear when it arises instead of constantly defending itself against its arousal and thereby

wasting psychic energy and perhaps limiting its potential for development. (e.g. agoraphobia).

(3) Ego continuity has to be established (cf. Erikson). Blos notes that ego continuity is disturbed when distortions of the family history (the 'family myth') are forced upon the child by adults, thus calling into question the validity of his own perception. The withdrawal of libido from infantile object cathexes (1) of course upsets ego continuity.

(4) Sexual identity: Blos distinguishes between gender identity which is established in childhood and sexual identity which becomes final in adolescence. Sexuality has to be integrated into the total personality and therefore the ego has to form new relations with the id. Initially the adolescent differentiates between 'tender love' and sexuality.

The first two tasks are fairly threatening to the adolescent ego (depending on its strength). Previously it relied on identifications with parental figures to maintain its control over id impulses and its general security. In childhood, identifications stabilize character as well as identity which partly accounts for the strength of dependency needs. In adolescence, however, these dependency needs have to be overcome so that an autonomous identity can be established, and therefore, the mechanism of identification is of limited usefulness and may even retard the growth of autonomy. (Singer, 1967).

Even though identity and identification have the same roots, Erikson maintains that identity is not the mere sum of identifications. He considers that introjection, identification and identity formation

are "the steps by which the ego grows in ever more mature interplay with the available models" (1968, p. 159). Introjection is the main mechanism in infancy before the ego has developed a modicum of autonomy which allows it to cathect libido onto its first 'love objects'. Then identification takes over, which strengthens the ego but at the same time establishes bonds which are ultimately restricting. Identity formation implies an autonomous ego synthesis of 'parts' which could not be accomplished by the mechanism of identification (although the 'parts' may derive from identifications).

Identification, nevertheless, remains an important ego mechanism during adolescence. Blos (1962) distinguishes between various forms of identification used during this stage: primitive (merging of self with object), defensive, counter-identification, transient (experimental) and adaptive (which is a "function of the autonomous ego"). The typical defense mechanisms used in adolescence are intellectualization and asceticism although far more primitive mechanisms (e.g. denial, introjection) may be resorted to, and creativity has a special adaptive function (as a means of working through previous conflicts) according to the traditional psychoanalytic view. (Spiegel, 1969).

Phases of adolescent development: Blos (1962) outlines five phases in adolescent development which will be presented briefly: *

- (1) Pre-adolescence is marked by an increase of instinctual drive

* Toolan (1967) describes three similar phases (early, middle, late) but this seems to be based mainly on psychoanalytic theories, and his description of the characteristics of each stage have been incorporated into Blos's scheme. The German stage theorists (Jaensch, Kroh and Remplein) also postulate three phases during adolescence: the early phase is seen as a period of instability (by all) and disintegration (Jaensch), and as a period of rebellion and 'negativism' (Kroh, Remplein). According to Jaensch middle adolescence is a period of relative integration. ^(Muss, 1962) On the whole their observations are in remarkable accordance with those of Blos and Erikson.

(non-specific), physical restlessness, the re-awakening of Oedipal conflicts, and a turning towards reality and away from infantile fantasies. Socially it is the 'gang' age.

(2) Early adolescence (puberty) is characterized by conflicts of bi-sexuality; idealized same-sex friends, and 'crushes' in girls.

(3) Adolescence proper sees the resolution of infantile conflicts and the disengagement from early object ties; a turning towards heterosexual object relations (experimental) and 'tender love' (no sexual contact); pre-occupation with "Who am I?"; often feels isolated (self-cathexis) and possessed of a fragmented existence; becomes more aware of inner experiences and inner reality; and we might add that 'formal operations' are integrated at about 15 years according to Piaget.

(4) Late adolescence is primarily a phase of consolidation which is "a narrowing down process, a delimitation and channeling".

"By this I mean the elaboration of: (1) a highly idiosyncratic and stable arrangement of ego functions and interests; (2) an extension of the conflict-free sphere of the ego (secondary autonomy); (3) an irreversible sexual position (identity constancy), summarized as genital primacy; (4) a relatively constant cathexis of object- and self-representations; and (5) the stabilization of mental apparatuses which automatically safeguard the integrity of the psychic organism." (Blos, 1962, p. 129).

It is the time of the identity 'crisis', of character formation, of finding a place in society and making choices.

(5) Post-adolescence (young adulthood) is regarded by Blos as a continuation of the adolescent process which involves the integration and harmonizing of the component parts of the personality; the gradual implementation of the life plan with commitments being made 'for life' (occupational, marriage, etc.); and the emergence of the "moral personality with its emphasis on personal dignity and self-esteem rather than on superego dependency and instinctual gratification" (Blos, 1962, p. 152). This is similar to Erikson's 'ethical sense' which develops during young adulthood and is the mark

of maturity according to his theory. (1968, p. 136).

Erikson considers that young adulthood is a separate stage in the life cycle but it does bear a very significant relationship to the adolescent stage: it is during young adulthood that the sense of identity is 'tested'. He opens his presentation of the 'syndrome' of identity confusion with "The Problem of Intimacy", and notes that identity confusion often only manifests itself in young adulthood when the problem of making commitments has to be faced and the individual attempts to engage in intimate relationships with others.

Independence and Dependency Needs: It was suggested in the previous section that the adolescent's struggle to overcome dependency needs and to establish his independence is of crucial importance for the outcome of identity formation. Many theorists see this as one of the major issues of adolescent development. Blaine (1963), Bauer (1963) and Cole (Morgan, 1969) postulate that independence versus dependence is a major conflict or problem in adolescence.

Blaine actually distinguishes between this conflict and identity formation. Schneiders (1963), Otto Rank, R. Havighurst, Jaensch, Kroh, Remplein (Muuss, 1962), and Garrison (Morgan, 1969) see the development of independence as an essential aspect of adolescent development or as a developmental task during this stage.

Blos is explicit about the need to break dependency ties with the family (the second individuation process) and he contends that the establishment of secondary ego autonomy (in contrast to primary ego autonomy which is established during the second stage) is essential to healthy character formation. Erikson, however, does not suggest

that the adolescent experiences any major conflict between independence and dependence, and at no stage does he explicitly discuss the problem of dependency needs. He contrasts autonomy with shame-and-doubt and not with dependency.

The establishment of autonomy in early childhood is very limited in a sense as the young child is, and remains throughout childhood, psychologically as well as physically dependent on others: he needs outer control and guidance in order to establish a sense of autonomy in the first place, and he needs to identify defensively with parental figures for further ego development to take place. In childhood dependency is a normal aspect of development (unless it is excessive) but the adolescent has to become a whole person in his own right, "an independent individual who can choose and guide his own future" (Erikson, 1968, p. 87 and p. 114). This is autonomy of a different order which is in direct opposition to dependency.

Loevinger (1966) maintains that autonomy is only achieved during the sixth stage of ego development, and remarks that it is 'unfortunate' that Erikson applied this term to the second stage which is primarily concerned with impulse control. Blos's distinction between the first individuation process during the second stage and the second individuation process during adolescence clarifies the issue to a certain extent. But Ciaccio (1970) concludes from a study of psychosocial development, based on Erikson's theory, in four to five, eight and eleven year-old children (using a projective technique) that "autonomy is actually the focal crisis of the first five stages" with each of Erikson's psychosocial crises representing

different aspects or dimensions of the development of autonomy. This supports Angyal's theory (Hall & Lindzey, 1957).

Whether there are one or two 'critical' stages in the development of autonomy or whether the development of autonomy is a crucial issue throughout childhood and adolescence are problems which require further research. The important issue for this study is the relationship between autonomy and identity. Erikson implies that a sound ego identity must be autonomous: he refers to "the obligation now to commit oneself with a sense of free will to one's autonomous identity ... " (1968, p. 183), and he continually mentions the exercise of free choice in identity formation during adolescence. He seems to assume that the adolescent 'automatically' turns away from his childhood and gives up his emotional dependence on his parents and other adults without undue personal conflict. He grants that the adolescent often turns to his peers or to youth leaders (including pop stars) for some sort of 'guidance' and support but he suggests that this is usually a transient phenomenon.

Adelson (1964), in particular, takes issue with Erikson and the psychoanalytic point of view on this question. On the basis of some 3,000 interviews with adolescents all over America (Douvan & Adelson, 1966), he suggests that the majority do not achieve emotional independence from their families and doubts whether they even seek it. They ask for, and are usually given, a considerable degree of behavioural freedom such as the right to come and go as they please, but this is relatively superficial independence.

Those that did display independence from their families were the more obvious youth at either end of the spectrum: the lower-class delin-

quent type who acts out his rebellion and resentment against society, and the upper-middle-class well-educated type who is often described as 'alienated' and who experiences acute intrapsychic conflicts and questions all values. It should be noted that it is this minority group which has been the subject of Erikson's attention - the rest tend to go by unnoticed by the clinician.

Loevinger (1966) also suggests that the majority of the population do not reach the sixth (autonomous) stage of development. It may be, then, that what Erikson describes as the normal process of identity formation in adolescence leading to an autonomous ego identity is not the 'normative' case after all. How do the majority form an identity then? Adelson found that they tend to avoid inner and outer conflict and that they make little effort to think independently or to question the socially accepted values. Their ego development is restricted and their identity prematurely consolidated: it is marked by "cognitive stereotypy, value stasis, and interpersonal conformity" (1964, p. 4). He calls it 'identity coarctation'. (See Appendix A-1 for a more detailed definition).

Erikson notes the trend towards conformity in America, as do Erich Fromm (1963), Lynd (1961), Friedenberg (1963), Bauer (1963) and many others. Friedenberg goes so far as to suggest that adolescence as a period of self-definition is disappearing, and both Friedenberg and Bauer contend that it is the American social system which is to blame because it does not like people to think independently and deliberately fosters dependency needs and conformity. There is not much room for independent thought and action in a society which is controlled by big business organizations and a monolithic political

system. Adelson suggests that the freely given behavioural freedom impedes the establishment of emotional independence (by masking the issue) on the one hand, while the extension of the moratorium by lengthy periods of technical training also impedes the growth of independence because the adolescent has to remain financially dependent for so much longer.

There are three inter-related problems involved: Firstly, dependency needs are difficult to overcome and it is difficult to make one's own decisions. Secondly, the society may not encourage independent thought and action which is apparently the case in America and it is undoubtedly the case in South Africa. Thirdly, the individual needs to find a place in society otherwise he cannot realize his potentials and his life becomes meaningless.

Erikson stresses this last point over and over again. In childhood, social recognition and approval is an indispensable support for ego development. In order to develop a realistic self-esteem, the accomplishment of each developmental task must be accompanied by social recognition and cultural meaning apart from the pleasure gained from such mastery.

"For the growing child must derive a vitalizing sense of reality from the awareness that his individual way of mastering experience, his ego synthesis, is a successful variant of a group identity and is in accord with its space-time and life plan." (Erikson, 1968, p. 49).

Thus the adolescent also needs to be 'recognized' by those around, to be "responded to and given function and status as a person whose gradual growth and transformation make sense to those who begin to make sense to him" (Erikson, 1968, p. 156). It is essential for

him to feel understood and approved of by significant others, to feel that his particular identity is 'a successful variant of a group identity'. Angyal has called the need to participate in something which is larger than the self, to share with others, to love and be loved, 'homonomy'. This term will be used to distinguish this healthy and essential need from dependency needs (desire for outer control and guidance).

The development of autonomy and homonomy are not necessarily antagonistic to one another. In the healthy personality a balance between them is maintained. The threat to autonomy is heteronomy (control by outside forces) and the threat to homonomy is social isolation according to Angyal's theory. Autonomy and homonomy may be two crucial aspects of identity formation. Tabachnick (1965, 1967) has made a similar suggestion: he hypothesizes that identity problems occur when the balance between 'self-realization' (autonomy) and 'social definition' (which does not have quite the same connotation as homonomy) is upset.

It is concluded that the establishment of autonomy in adolescence may be a very real problem, especially in a society which refuses to be challenged and demands conformity. Then, to insist on one's autonomy and to think anew means to risk isolation (the loss of homonomy) or, even worse, identity confusion. It is perhaps easier to curtail one's autonomy and initiative, one's capacity for independent thought and youthful idealism, and conform to social demands and standards - then at least one is assured of a sense of identity (though restricted) and a place in society. "For, indeed,

in the social jungle of human existence there is no feeling of being alive without a sense of identity" (Erikson, 1968, p. 130). This is what the majority of Adelson's subjects seem to have done: Their development was motivated by an avoidance of conflict, of isolation, and of identity confusion.

So far the discussion of identity problems has implicitly assumed that the individual has an almost 'inborn' drive towards autonomy and freedom which is only suppressed by external, social forces or by "an unwillingness to take psychic risks" in a hostile society. Searles (1966) suggests that there is also an internal 'urge' to yield up autonomy and submit to others which is not merely the product of the frustration of autonomy. He says that Erikson underestimates how ambivalent human beings are about establishing an individual, autonomous identity. He refers to:

"our universal urge to yield up our individual identity and flee into, for example, totalitarian ways of relating ourselves to our fellow men, because we find so heavy the demands inherent in individual freedom."
(Searles, 1966, p. 8).

Searles' argument is based on Erich Fromm's 'fear of freedom' (1950) and relates to the problem of alienation (estrangement in Erikson's terminology). He suggests that there are strong regressive pulls towards symbiosis, to that 'lost paradise' which Erikson describes when the infant was at one with the world (undifferentiated from it) and omnipotent at the same time.

Erikson, however, does briefly discuss "how strong and systematic are man's proclivities and potentialities for total realignments"

and postulates "a psychological need for a totality without further choice or alternation" which he calls 'totalism' (1968, p. 80 and 81). He describes totalism as a more primitive level of ego integration "made necessary by increased anxieties, especially of an infantile origin, and called forth by acute life crises (p. 80) where totalities and conformities must help to preserve a sense of security" (p. 82). Therefore one would expect youth to be particularly vulnerable to totalism.

Wholeness and Totality: Totalism must be understood in contrast to 'wholeness':

"Both mean entireness ... Wholeness seems to connote an assembly of parts, even quite diversified parts, that enter into fruitful association and organization. As a Gestalt, then, wholeness emphasizes a sound, organic, progressive mutuality between diversified functions and parts within an entirety, the boundaries of which are open and fluid. Totality, on the contrary, evokes a Gestalt in which an absolute boundary is emphasized: given a certain arbitrary delineation, nothing that belongs inside must be left outside, nothing that must be outside can be tolerated inside." (1968, p. 81).

Every attempt at ego synthesis is an attempt to achieve wholeness. This occurs at the end of every stage because development during each stage increases the diversity of parts and brings with it new tensions which have to be integrated. Each stage, therefore, is a higher level of integration permitting greater tolerance of diversity and tension than the previous one.

When the sense of wholeness is lost or cannot be restored by a more complex ego-synthesis, the ego resorts to totalistic restructuring. This often occurs during periods of crisis but it is usually transitory, as in the 'joiners' of adolescent cliques and some youth movements which have very firm, often arbitrary, boundaries. Erikson, like Fromm and Searles, sees the estrangement of each stage as

being the most serious threats to wholeness and which predispose the individual to a total solution. The ontological source of "wholeness" is the infant's symbiotic relationship with its mother, but Erikson implies that all later attempts to achieve a sense of wholeness through symbiotic-like attachments are false and involve total realignments.

Erikson postulates that there are three stages which are particularly vulnerable to totalism, and attempts to show how totalitarian political systems exploit the conflicts of these stages in order to gain and maintain power. Infancy, the Oedipal stage, and adolescence are the three major crises of wholeness according to Erikson. His analysis of totalitarianism shows a greater awareness of the complexities involved than many other explanations that have been offered, but it is still not entirely convincing. Erikson's view of 'human nature' is essentially optimistic and he concentrates on the external (social) forces which predispose men to support totalitarian systems rather than on any inner predispositions to such behaviour. It is a necessary counterbalance to the more pessimistic views of Fromm and Searles, but they are not mutually exclusive.

The sense of wholeness to be achieved in adolescence according to Erikson is the sense of identity. He describes the choice of a 'negative identity' as well as the submission to a totalitarian ideology as a total solution to the identity crisis. Total solutions involve a restriction of ego development (and therefore of identity) and a projection of inner dangers onto outside groups. It is an ego-synthesis on a more primitive level of development, and the degree of ego restriction is probably determined by the level at

which this total realignment takes place or by the degree of regression involved. We are now in a better position to discuss the various types of identity formation which can take place.

6. Different Types of Identity Formation and Aetiological Factors.

It is possible to distinguish four main variations in identity formation which result in different types of identity. Erikson's work and the preceding discussion has been mainly concerned with the first two : the polar opposites.

(1) Autonomous ego identity ~~which~~ is the product of healthy ego development. It is established at the end of adolescence creating a new sense of wholeness following a period of individuation, experimentation and ego re-organization. It is characterized by the achievement of real independence and individuality, active mastery of conflicts and anxiety, and involvement in social situations. The individual is free to realize his potential and able 'to choose and guide his own future' without feeling threatened in intimate or competitive situations.

"An optimal sense of identity is experienced merely as a sense of psychosocial well-being. Its most obvious concomitants are a feeling of being at home in one's body, a sense of 'knowing where one is going', and an inner assuredness of anticipated recognition from those who count." (Erikson, 1968, p. 165).

(2) Identity confusion is the result of outright failure in the process of identity formation and can manifest itself in psychotic-like episodes or malignant withdrawal. The break-down usually occurs at the end of adolescence or in young adulthood.

"Symptomatically, this state consists of a painfully heightened sense of isolation; a disintegration of a sense of inner continuity and sameness; a sense of overall ashamedness; an inability to derive a sense of accomplishment from any kind of activity." (Erikson, 1968, p. 168).

The 'symptoms' of this state were presented in section 4.

Erikson found that a significant number of his patient's mothers were extremely aware of social status and almost always ready to "overrule matters of honest feeling" in order to maintain a facade of wealth, propriety or 'happiness'; they had a quality of "penetrating omnipresence" from which it was difficult for the child to escape; "they love desperately and intrusively", and they were extremely jealous. The patients perceived unconsciously that their mothers felt that their husbands had failed to make women out of them and that they (the patients) had failed to make mothers out of them. There was a 'reciprocal negative reaction' between the patient and mother instead of mutuality. The fathers failed to stand up to their wives and were often jealous of their children.

The mother is uncertain of her identity and seeks approval and affirmation of her identity from her child. Thus she cannot allow her child to establish an autonomous identity lest it threaten her own. Searles (1966) made similar observations of the mother-child relationship of his schizophrenic patients. Erikson's case histories showed that some early infantile autism was nearly always present plus a severe physical trauma either during the Oedipal stage or during puberty (usually in the form of a separation from home).

Sommers (1964) studied identity confusion in patients belonging to more than one culture. She found that all her patients had a low self-esteem and felt rejected by one or both their parents which stemmed from early childhood. This made them sensitive to social rejection and discrimination. The second aetiological factor was

the perception that the parental culture was considered inferior by the dominant culture which created conflicting loyalties and cultural identity confusion. It may be concluded that severe identity confusion in adolescence stems from a disturbance during the first years of life. Various case histories reported in the literature support this (Hayman, 1965; Welch, 1968; Tabachnick, 1967), but these are cases of severe identity confusion. Koenig (1964) describes the symptoms of 28 young Jewish adults who had been subjected to persecution in ghettos and concentration camps during their adolescence. In contrast to older concentration camp survivors (who manifested 'chronic reactive depression') and the typical identity confusion case histories these patients were relatively 'successful' in their adjustments. However, their problems could only be understood in terms of a disturbance in identity formation resulting from severe trauma during puberty.

(3) Negative identity is a socially deviant type of identity formation, e.g. delinquency, crime, alcoholism, drug addiction, prostitution, homosexuality (in some cases) and even suicide according to Erikson. It is a total realignment at a more primitive level of ego integration when identity conflicts become too difficult to resolve positively. The adolescent who indulges in drinking, taking drugs or delinquent-type behaviour, however, may not have 'chosen' a negative identity but may be experimenting or using these outlets as a temporary escape from overwhelming conflicts. The problem arises when drinking becomes a way of life (Hartocollis, 1964), drug-taking an addiction, or the experimental delinquent finds himself in court - once he is officially 'labelled' as a delinquent it becomes increasingly difficult to be accepted back into society and he may give up trying to find a 'good' identity.

The child who is continually told what he should not become rather than what he might become may find in adolescence that the only 'real' identity configuration available to him is the negative one. In other cases the choice of a negative identity may be a protection against excessively high ideals which are demanded by ambitious parents or actualized by superior parents. Or it may result from an inability to find a niche for oneself in the dominant culture, from a sense of futility or meaninglessness.

Every group identity has a positive and negative aspect. The negative image is usually based on the stereotype of a minority outgroup, e.g. the Jewish stereotype or the Negro images ("mammy's oral-sensual 'honey-child' - tender, expressive, rhythmical" (slave identity) or the evil "dirty, analsadistic, phallic-rapist 'nigger'" - Erikson, 1965, p. 234). The minority group member usually tries to identify with the majority group and ends up adopting their negative identity.

The choice of a negative identity involves the rejection of roles and values considered desirable by the family and community as a result of a disturbance in psychosocial development which has created severe identity conflicts. The choice of a negative identity is a desperate attempt to avoid identity confusion which remains under the surface. The type of negative identity seems to be determined by the stage of development to which the individual regresses in his attempt to find a stable foundation for an ego-synthesis.

Regression to the first stage will result if the individual has never established a sound sense of autonomy so that an 'oral-dependent' character structure emerges. This is often manifest in alcoholics and drug addicts who seem to be trying to dispel the awareness of their separateness from the world. The Negro 'slave identity' which Erikson describes is also based on a regression to this dependent stage. Regression to the second stage would probably result in a rebellious, destructive or anarchistic type of identity.

The phallic-aggressive character type may emerge in an individual who regresses to the third stage. His initiative cannot be channelled into socially acceptable activities so it is used anti-socially as in delinquent gangs. It is difficult to predict what kind of negative identity might emerge if the regression is to the fourth stage so that the sense of industry is directed towards unacceptable activities (?petty crime, stealing). The negative identity of the big-time criminal would usually result from a regression to the second or third stages. The individual may also avoid identity confusion and perhaps regression by submitting to a totalitarian system which Erikson describes as a 'total solution' to the identity crisis.

(4) Foreclosed (defensive) identity: Erikson makes few references to 'identity foreclosure' but this type of identity formation is distinguished by several other writers in the field (Prelinger & Zimet, 1964, and Marcia, 1966 - see Appendix A-1). The foreclosed identity is described as being rigid, restricted and defensive. Blos (1962) refers to a similar concept which he calls an 'incomplete adolescence': it is a neurotic or defensive adaption due to intrapsychic disturbances, inhibitions, and/or the avoidance of anxiety (symptom formation).

The essential feature of foreclosure in identity formation is that a premature consolidation of identity takes place in order to ward off anxiety. In contrast to identity confusion or negative identity formation, it is suggested that more or less normal development proceeds until a stage is reached where the psychosocial conflict cannot be resolved successfully; the ego overcomes this intolerable situation by establishing a defensive character structure which avoids the anxiety (e.g. guilt might be projected onto others). In normal development the positive characteristic (e.g. initiative) is the basis for ego-synthesis which allows the ego to tolerate a certain amount of the negative aspect (guilt). In defensive development the ego cannot tolerate the anxiety (guilt) and defends itself against it even though initiative might have to be restricted as a result.

By establishing a defensive ego-synthesis the ego loses its flexibility which would have allowed it to cope with later developmental conflicts by re-synthesis. These conflicts have to be avoided and all further development is restricted to the existing defensive ego structure which is preserved at all costs. Thus ego development becomes fixated and identity formation is foreclosed. Of course, a breakdown may occur later if the ego is overwhelmed by conflict, but where a defensive character structure and identity are supported by the social environment this is unlikely to happen.

Foreclosure has to take place before late adolescence is reached and therefore it is unlikely that real ego autonomy is ever established by individuals manifesting a foreclosed identity. They are

likely to be dependent on others with strong needs for security and approval which lead to conformity and/or submission to others. The degree of dependence and ego restriction, however, probably depends on the stage at which development became fixated. The earlier ego development becomes fixated the more neurotic it is likely to be. Thus one might also be able to distinguish various types of defensive identities depending on the stage at which identity formation was foreclosed. Several different types will be suggested.

Stage I: A disturbance in development during the first developmental stage might threaten the infant with overwhelming mistrust and autistic isolation. In order to avoid this the schizoid defensive position may emerge. The individual avoids mistrust of himself by projecting it onto others whom he then feels are hostile towards him. He preserves a sense of identity by keeping his 'real self' hidden and ^{by} developing a 'false-self' (mask) which interacts with the social environment (Laing, 1965). He avoids total isolation (autism) but his sense of identity will be extremely shaky and his development will be very limited. His basic identity may be summed up in this phrase: I am what I can keep from others (in contrast to the normal "I am what I hope and give" which derives from the first stage according to Erikson).

Stage II: An individual whose development was successful during the first stage but who cannot develop a sound sense of autonomy (and the will to be oneself) during the second stage may attempt to avoid shame and doubt (and self-doubt) by forming a compulsive or obsessive (defensive) character which is likely to be accompanied

by symptom formation (Erikson, 1968, p. 111 - 112). His identity is not based on "I am what I can will freely" but it becomes entirely focussed on: I am what I can control. He may be very compliant and dependent but he may also attempt to control others.

Stage III: Erikson describes a type who overcompensate by "a great show of tireless initiative" which he calls 'go-at-iveness' (1968, p. 120). It is the result of identity foreclosure at the third stage in an attempt to avoid guilt and total role inhibition. He is continually on-the-go and cannot stop to think lest he feel guilty and his role behaviour is likely to be rigid. This condition is usually accompanied by psychosomatic symptoms (e.g. ulcers) and possibly sexual impotence. His identity is based solely on what he is doing or going to do next: I am what I am going at, instead of "I am what I can imagine I will be".

Stage IV: Fixation during this stage may result in what Erikson calls the 'technological slave' (1968, p. 127). His identity is based exclusively on his work and this is the yardstick by which he measures his worth: I am what I can make work. His thought processes will be stereotyped and rigid as in the concrete operational stage. Shainberg (1970) contends that the everyday thought processes of individuals with neurotic or defensive characters display concrete operations. This type probably corresponds with Loevinger's (1966) 'conformist' stage (the fourth) and they do not go beyond it.

Adelson's concept of 'identity-coarctation' does not carry quite the same neurotic connotation as the descriptions of different types of foreclosed identities above. It implies instead a foreclosure

during the adolescent period but before the identity crisis stage is reached in late adolescence. It is an attempt to avoid identity confusion but because it occurs at this relatively late stage the ego-structure will be less restricted and neurotic than the above types. The ego will not be completely autonomous but it will have a fair amount of flexibility. This type is probably capable of 'formal operations' and is less conformist than the previous type (cf. Loevinger's 'conscientious' stage - the fifth). Identity may be consolidated around technical skills and occupational role for men (around the roles of wife and mother for women) but it also extends beyond this. These are the people who fit into modern industrial society most comfortably and they do not seriously question accepted values and standards.

Blos (1962) describes another disturbance in adolescent development which he calls 'prolonged adolescence': it is a postponement of character consolidation when the task of ego-synthesis becomes too difficult. Erikson refers to a similar "state of paralysis" which has the function of "maintaining a state of minimal actual choice and commitment" (1968, p. 167). This condition is similar to the syndrome of 'alienation' which is receiving an increasing amount of attention in the literature on adolescence. The main symptoms described by Davids (1955) are egocentricity, distrust, pessimism, anxiety and resentment. Their major problem is a fear of commitment instead of the fear of isolation as in the 'identity-coarctation' type. Their independence is most important to them but they cannot establish homonomy. Deutsch (1968) briefly discusses the psychodynamic aspects of this type.

The preceding discussion of the types of negative identities and foreclosed identities is suggestive only and does not attempt to exhaust the possibilities. It does try to integrate what is known about disturbances in identity formation and provide a more comprehensive framework for understanding the variations in identity formation. It should be born in mind that these disturbances cannot be neatly classified and labelled: for example, the relatively successful schizoid defensive character has been described as the result of a fixation at the first developmental stage, but schizoid-like defenses may be observed at almost any stage or in any type of identity formation.

PART II:

RESEARCH DESIGN

1. A Review of the Research in the Field.

Almost all the research studies concerned with Erikson's concept of identity have used college students (late adolescents) as subjects and these have usually been men. Thus the research is based on a very small segment of the population which may be atypical as far as identity formation is concerned. The university environment is likely to provoke new identity problems and the student has an extended 'moratorium'. This review covers all published studies up until 1970. A considerable number of unpublished dissertations exist but few of these seem to have yielded any significant findings.

Earlier Studies:

In these studies the operational definitions used to define identity are extremely narrow for the most part and none of these studies devised direct measures of identity. Their findings are of limited value on the whole.

Bronson (1959) derived the following criteria as manifestations of identity confusion: (a) uncertainty about the relationship between past and current notions of the self; (b) greater tension and anxiety; (c) uncertainty about dominant personal characteristics; and (d) greater fluctuation in feelings about self. Using interview-rating and semantic differential techniques with 42 female and 4 male student subjects (19 - 22 years), he found that these characteristics were significantly intercorrelated.

Gruen (1960) used a high self/ideal-self discrepancy as an operational definition of identity confusion (correlated with a rough measure of identity which consisted of 14 items). Using a Q-sort technique

with 45 students (18 - 24 years), he found that those with high discrepancy scores were more ready to accept false information about themselves than those with low discrepancy scores.

Self/ideal-self discrepancy has also been used as a measure of self-esteem (Coopersmith, 1959; Hamilton, 1969).

Block (1961) operationally defined identity as role consistency in contrast to role rigidity and role variability. 41 college students were required to rank a list of 20 adjectives eight times so as to characterize their own behaviour while with each of eight specified 'significant' others, and they also completed the California Personality Inventory. It was hypothesized that subjects manifesting role rigidity (high scores) and role variability (low scores) would be more neurotic than subjects manifesting role consistency but there was no evidence of curvilinearity in a correlation between Role Consistency scores and the CPI Psychoneuroticism scale. Subjects displaying 'role diffusion' (variability) endorsed CPI items reflecting social inarticulateness and concern, personal tension and neurotic character, cynicism based on disappointment, and familial tension.

Heilbrun (1964) used Block's Role Consistency measure to investigate sex-role identity in 54 male and 61 female students. He found that in males high role consistency was related to high masculinity scores, while in females high role consistency was related to high and low femininity scores and low role consistency (variability) was related to average femininity scores.

Hershenson (1967) tested the hypothesis that occupational identity (measured by a multiple choice questionnaire) is central in the formation of an identity (operationally defined as congruence between self ratings and expected ratings of self by others). He also hypothesized that identity and 'occupational fit' would be related to degree of 'enculturation' (conformity to social norms). The hypotheses were confirmed for 162 Harvard male students but he found that the relationships between identity scores and 'occupational fit' ceased to be significant when 'enculturation' was partialled out. School background (public vs. private) and value orientation (traditional-inner-directed vs. emergent-other-directed) were also found to be important variables.

Mogar (1964) investigated value orientations in 117 male and female students. A modal pattern emerged which he described as 'privatistic' (economic security, family, career) while a second pattern involved the establishment of a personal identity as most important (included altruistic, ideological and intellectual values). There was also a third male 'proletarian' pattern whose adherents were mainly from a working class background. The findings as regards the modal group suggest Adelson's (1964) 'identity-coarctation' while the 'identity' group seemed to be in the midst of an identity crisis as described by Erikson. The latter group was more humanitarian and tolerant, but most of the subjects were apolitical and few expressed conflict with parents.

Studies using direct measures of identity:

(1) Rasmussen (1964) devised a 72-item questionnaire based on Erikson's description of the manifestations of the first six psychosocial crisis stages during adolescence - the Ego Identity Scale (EIS),

He found that a peer nomination measure of 'psychosocial effectiveness' was related to high EIS scores and to self-acceptance

(Adjective Check List - ACL) in a sample of 107 naval recruits.

EIS and ACL scores were also positively correlated. The results of intercorrelations among the EIS sub-scales led to the conclusion that identity confusion is related to disturbances in the first stage of development. Some rather specific hypotheses were not supported but these findings will be discussed in greater detail later.

(2) Dignan (1965) has devised a 50-item Ego Identity Scale (D-EIS) and a 17-item Rating Scale for Identity Traits (self-rating). These two measures correlated significantly with each other and with a measure of maternal identification for a sample of 245 female students (17 - 20 years) at a Roman Catholic college. D-EIS scores have also been found to correlate negatively with a measure of manifest anxiety and number of mother-daughter problems (Howard & Kubis, 1964), and positively with a measure of ego strength, with six factors of Cattell's 16 PF Questionnaire (ego strength, composure, self-confidence, social adventurousness, character, superego) and with age (reported by Dignan, 1965). Correlations (negative) with a measure of manifest hostility were not significant (Howard & Kubis, 1964).

(3) A 60-item Q-sort measure divided into sub-scales reflecting Erikson's first six psychosocial stages was constructed by Wessman & Ricks (1966). The items were based on self-descriptions by college men and the measure was not subjected to any stringent test construction techniques. Their study was concerned with mood and personality (small sample of Harvard men) and provided some interesting

findings as regards identity formation. Waterman, Buebel & Waterman (1970) administered a modified version of this instrument to 87 male students in their second investigation of the relationship between the resolution of the identity crisis and the outcomes of previous psychosocial crises. Controlling for social desirability response set they found that scores on the identity sub-scale correlated significantly with scores on the sub-scales reflecting the previous stages, thus providing support for Erikson's epigenetic principle of development.

(4) A semantic differential measure of identity was constructed by Hess, Henry and Sims consisting of 56 word pairs reflecting Erikson's eight psychosocial stages and a pathographic factor. Cohen & Miller (1969) used this measure to investigate some aspects of upward social mobility.

All of the studies reviewed so far provide some support for Erikson's theory in spite of their limitations. The earlier studies (except Mogar, 1964) are of doubtful value because of the extremely narrow operational definitions employed. Those studies which used specifically designed measures of identity failed to account for much of the variance involved. Rasmussen's (1964) findings do little more than provide some evidence of the validity of his Ego Identity Scale. The studies using the D-EIS used narrow (perhaps atypical) samples. The subjects were from a Roman Catholic women's college, and Marcia & Friedman (1970) suggest that the majority of these subjects may have had foreclosed identities. The major limitations in all of these studies was their failure to take into consideration the various types of identity formation discussed in Part I. Mogar (1964) and Wessman & Ricks (1966) provide some sugges-

tive findings which bear further investigation.

(5) The most effective technique for the assessment of ego identity formation available is probably the one devised by Prelinger & Zimet (1964). It consists of a large number of 5-point rating scales designed to assess many of the facets of character development (ego-psychological approach) which can be used to quantify data gathered from interviews and projective techniques. It includes scales to assess psychosocial development according to Erikson's theory (first seven stages), and they have also done preliminary work to establish which of their scales are relevant to three types of identity formation (normally developing, rigid or foreclosed, and conflicted or diffuse). The major problem with this technique is that it is extremely time consuming.

Identity status studies:

Studies in this area have used the 'identity status' semi-structured interview technique designed by Marcia (1966) to classify subjects according to four types of identity formation: Identity-achievement, Moratorium, Foreclosure and Identity-diffusion. Two criteria were employed to make the classifications: the presence or absence of crisis (serious consideration of meaningful alternatives) and degree of commitment (degree of personal investment in decisions) (see Appendix A-1). The interview was designed to obtain data on three aspects of identity formation: occupational choice, religion and political ideology (attitudes toward premarital sex was included in the interview for women - Marcia & Friedman, 1970). All classifications required agreement between at least two out of three independent judges. Inter-rater reliability has been found between 70 and 75%.

Four studies have been published by Marcia and his colleagues and three others were found in the literature. There have also been a number of unpublished studies. The published studies and samples used in each are:

- (1) Marcia, 1966: 86 male students (psychology, religion and history).
- (2) Marcia, 1967: 72 male students (introductory psychology).
- (3) Marcia & Friedman, 1970: 49 senior women students.
- (4) Podd, Marcia & Rubin, 1970: 56 males & 56 females (intro. psychology).
- (5) Waterman & Waterman, 1969: (a) 15 freshmen & 17 juniors (engineering).
(b) 241 male students (Polytechnic).
- (6) Waterman et al., 1970: (a) 92 male freshmen (Polytechnic).
- (7) Cross & Allen, 1970: 81 college males.

The results of these studies will be briefly summarized and references will be indicated by the margin numbers appearing above.

Scores on a measure of overall identity (Ego Identity Incomplete Sentences Blank - 23 items) devised by Marcia failed to differentiate between all the identity 'statuses' (1). Identity-Achievement and Moratorium subjects received the same mean score while the Identity-Diffusion subjects received a significantly lower mean score than the other statuses combined.

Cognitive variables: No significant differences among the statuses have been found for measures of intelligence (3), for scores on the Scholastic Aptitude Test (7), and for measures of cognitive functioning and flexibility (3). Performance on cognitive tasks under stressful conditions has been found to differ among subjects of different identity status (1) but other results have been less clear-cut (Bob, 1970 - unpublished). Identity-achievement subjects obtained significantly higher Grade-point Averages (7) and were also found to choose significantly more difficult college majors (3) than subjects in the other statuses.

Self-esteem: The deCharms & Rosenbaum 20-item scale was used to measure feelings of self-confidence and worthiness and no significant differences between the statuses were found for male students (1 and 2) but female Foreclosed subjects^{scored} significantly higher than subjects in the other statuses (3). Results of self-esteem manipulation (false information about self) were equivocal (1 and 2).

Psychological Adjustment: On The Welsh Anxiety Scale Foreclosed subjects obtained significantly lower mean scores than the other statuses combined (2 and 3). In the male sample the Moratorium subjects obtained the highest mean score (2) but in the female sample the Identity-diffusion subjects were most anxious (3) - both results were significant. In contrast to these findings, no significant differences between the statuses were found for three sub-scale scores (hostility, depression and anxiety) on the Zuckerman Mood Affect Adjective Check List (7).

Authoritarianism: Foreclosed subjects obtained significantly higher mean scores for 10 items of the California F-Scale ('authoritarian submission' and 'conventionalism') than subjects in the other statuses in three studies (1,2 and 3). There were no consistent patterns of scores among the other three statuses in these studies.

Autonomy and Interpersonal Trust: The Rotter Internal-External Control Scale (as a measure of autonomy) and the Rotter Interpersonal Trust Scale were administered (6a). The subjects were divided into three identity status groups: high (Identity-achievement & Moratorium), mixed, and low (Foreclosed & Identity-diffusion), and

significant differences were found for the autonomy measure (expected direction) but not for the trust measure.

Co-operation and Competitiveness: The Prisoner's Dilemma Game was used as the experimental condition (4) and the findings provided evidence that Moratorium subjects were more rebellious but also more inclined to seek guidance and were more anxious than subjects in other statuses. Contrary to expectation the Foreclosed subjects were not more co-operative with a 'high authority opponent' (professor) than with a 'low authority opponent' (peer), but the 'opponents' were not visible to the subjects and the game was manipulated by the experimenter.

Satisfaction with college: Foreclosed subjects were found to be most satisfied with college while Moratorium subjects tended to be least satisfied (5a). However, a second study (5b) showed that the important variable in college satisfaction was whether the career 'crisis' occurred during high school or while at college.

These studies have shown that the concept of 'identity status' is a useful one and they provide additional support for Erikson's theory. The findings relating to self-esteem and adjustment suggest that foreclosed subjects tend to be defensive (high self-esteem, low anxiety) but the results are far from clear and should be investigated further. Marcia (2) pointed out that in a College sample extreme cases of identity confusion are seldom encountered, but his definition for 'Identity-diffusion' is ambiguous (see Appendix A-1).

It does not distinguish between (a) the 'happy-go-lucky', other-directed individual who is unconcerned about ideological matters and is likely to take the best occupational opportunity which comes his way (Offer, et al, 1970 describes this type); (b) the type who has not reached a 'crisis' stage yet (which one would not expect to find in a college sample), and (c) true identity confusion where the individual experiences many conflicts and a certain degree of disintegration. This is the type who is anxious and likely to be maladjusted. Types (a) and (b) may not have achieved an autonomous ego identity but they are unlikely to be suffering identity confusion.

The second criticism relates to the choice of variables used in these classifications: occupational choice, religious and political values and opinions. Hershenson (1967) has thrown some doubt on the importance of occupational choice in identity formation (for some subjects), and Mogar (1964) found that religion had little meaning for the majority of his subjects while almost all were apolitical. Adelson (1964) also found that the majority of his subjects avoided ideological matters. Erikson stresses the importance of an ideological frame of reference but it need not be explicit. These aspects of identity formation are conscious and it is felt that Marcia's classifications would be more valid if some attempt were made to assess ego integration as well.

Bob (1970) made some interesting speculations on the basis of her results (unpublished). Firstly, she found that 'Identity-achievement' subjects either conformed to expectations or they behaved in the

opposite way. She suggested that the latter group 'chose' to fail on the cognitive tasks involved in the experiment because they were 'anti-establishment'. Secondly, she suggested that the 'Identity-diffusion' status as defined by Marcia may be another way of resolving the identity crisis and that it reflects less pathology than one would expect. This would correspond with type (a) above.

Simmons (1970) has devised an objective measure of Identity Achievement Status (IAS) based on Marcia's Ego Identity Incomplete Sentences Blank (1966). It consists of 24 items selected statistically from a pool of 90 items. The test-retest reliability reported is .764, and there is also some evidence of its validity.

Developmental studies:

Constantinople (1969) modified the Wessman & Ricks Q-sort to test a large sample (N=952) of full-time male and female students from all four undergraduate classes (freshmen, sophomores, etc.) and they were followed up for the next two years. The final sample contained only about 30% of the original sample. She presents three sets of cross-sectional data and two sets of longitudinal data which cannot be fully discussed here, and she analysed the developmental trends for the positive and negative aspects of each psychosocial stage separately. The longitudinal data suggested that the developmental trends found in the cross-sectional data for the fourth sub-scale (Industry vs. Inferiority) were due to the attrition of 'Inferior' subjects; but there were significant development trends for the first, third and fifth sub-scales. The findings for the sixth stage were confusing.

Despite the crude measuring instrument which was used in this study, it does provide some evidence for Erikson's theory and shows that on the whole college students are still involved in resolving identity problems. Other workers have also found that identity scores increase with age in college populations (reported by Dignan, 1965; Howard & Kubis, 1964). Rasmussen (1964) also found some relation between age and identity scores in his naval recruits.

Offer, Marcus & Offer (1970) report results obtained in their post-high school follow-up of 73 average middle class boys. The development of these subjects had been studied for seven years since their freshman year at high school. The subjects were 'average' because those manifesting superior or inferior adjustment were originally excluded. 82% of the original sample went to college. During the first year after high-school graduation they were asked to complete the Hess-Henry-Sims Identity Scales (90% complied with the request). The results of this test showed that the group was functioning within an average range (no very high or low scores). The authors conclude that they were "consolidating their identity". In terms of the over-all data for the seven years they found that the majority of their subjects experienced mild or moderate identity crises while only a few manifested severe conflicts.

The authors suggest three main types of (average) adolescent development: (1) some conflict with parents as regards independence; introspection, some dissatisfaction with self and depression followed by an adequate adjustment towards the end of college; (2) little developmental progress, remain dependent on parents or shift dependency

needs to male or female peers; and (3) smooth, gradual development with a "noiseless" identity crisis, self-confident and satisfied with their choices and opportunities. For the majority of the group, independence was gradually achieved through the seven year period with little conflict with parents. There was little evidence of radical political thinking or experimentation with drugs. Few had developed mature (intimate) 'object relations' by the end of their third college year but the majority were moving in this direction.

Douvan & Adelson (1966) in their nation wide study of 1045 boys (14 to 16 years) and 2005 girls (11 to 18 years) attending high school obtained similar results. (Summarized by Adelson, 1964). The data was obtained from a semi-structured interview which covered future plans and aspirations, values and controls, family relationships and family structure, peer and heterosexual relationships. Their major findings can only be touched on here. A realistic orientation towards the future was found to be characteristic of good psychological adjustment. However, they found marked differences in development between boys and girls. In boys the future (and their identity) was usually seen in terms of vocational plans which were concrete and specific. The girls usually focussed on marriage and the roles of wife and mother but the future was hazy and dream-like (often stereotyped). Their vocational choices represented feminine concerns (such as helping or meeting others). Boys whose aspirations were downwardly mobile and girls who expressed 'anti-feminine' goals were found to be poorly integrated and adjusted.

On the whole, the establishment of behavioural independence and internal controls was found to be an important issue for the boys only and it was clearly related to personality integration and heterosexual

adjustment. The girls, on the other hand, tended to remain other-directed but general independence did increase slightly with age. Development in interpersonal relations was found to be the best predictor of ego integration and was the focus of identity formation for the girls. Identity development in girls, they suggest, is a consequence of intimacy rather than a precursor of it.

The authors conclude that traditional views of normative adolescent development (particularly the psychoanalytic) (1) overestimate the degree of parent-adolescent conflict, which is avoided by both parties; (2) wrongly evaluate the autonomy issue - most adolescents do not achieve emotional independence from their families (especially girls) and few question the accepted values and standards; (3) misinterpret the role of the peer group, which serves not so much to give emotional support and test identity, but through which social skills and sociability are learnt and displayed; (4) overemphasize the instinctual (sexual) impulse problems (especially for girls); and (5) they underestimate sex differences in developmental patterns during adolescence. We have already mentioned 'identity-coarctation' which they describe as the normative solution of identity formation.

Other studies:

McNassor (1967) compares the social structure of Western Europe and America (no systematic empirical or statistical data) and speculates on the consequences for identity formation in adolescence. He concludes that American adolescents are likely to experience greater identity conflicts than their European counterparts. Gregor & McPherson (1966) have investigated racial preference and ego identity

in samples of South African White and African (urban and rural) children aged 3 to 7 years using the Clark doll test. Many other studies and articles have been concerned with identity formation in various minority groups and no attempt has been made to review these (most of them seem to be speculative). There have been few systematic clinical studies but psychoanalysts and psychiatrists have contributed a great deal to the literature on identity. These articles are usually theoretical and/or reports of case histories.

2. General Method and Relevant Variables.

The major objective of the present study is to investigate the development of a sense of identity during the adolescent period. A secondary objective is to collect normative data on various aspects of adolescent development within the overall framework of Erikson's theory.

The decision as to what age range of development should be covered was somewhat difficult. Identity formation neither begins nor ends with adolescence but this is the critical phase for the establishment of a sense of identity. Adolescence begins at puberty but the onset of physical maturation is an extremely variable phenomenon (Reynolds & Wines, 1969); Stuart, 1953). As identity formation is the psychosocial aspect of adolescent development it was decided that a psychosocial, rather than psychosexual, definition of the age range would be more appropriate.

Entrance into high school marks the end of childhood for the majority of the population, and it generally coincides with puberty. In addition, the high school 'freshman' (Std. 6) finds himself accorded different status in the high school (he was at the top of the ladder in the junior school); he has older youths to emulate; he has to learn new roles and a variety of new school subjects; intellectually, new and greater demands are made upon him, and sooner or later he has to choose a school curriculum which means a consideration of future vocational plans. Therefore, the onset of identity formation operationally defined by entrance into high school (Std. 6).

The identity 'crisis' occurs during late adolescence according to Erikson, but the psychosocial 'end' of adolescence is extremely vague. Socially, the moratorium ends with the achievement of adult status, when the individual is expected to make his own decisions, assume adult responsibilities, earn his own living, and stand by his commitments. At eighteen the individual is allowed to vote, obtain a driver's licence, is considered old enough to defend his country and becomes subject to the adult penal code. However, he remains a minor (legally) in other respects until the age of 21 when he is 'ritually' granted his independence. From 18 to approximately 21 years, therefore, his adult status is ambiguous, but school leaving does seem to be a critical first step and it is a time when reasonably decisive choices as regards career and future training have to be made.

It was concluded that adolescents attending high school (approximately 12 years to 18 years, although some may leave school as early as 16 years) could safely be regarded as being in the psychosocial moratorium and that this would be the most suitable age range for a developmental study of this nature. Of course, matriculation does not necessarily mean the end of the moratorium - boys have a year of military training and those who go to university can continue to experiment and choices can be postponed. However, some do begin to earn their own living and many enter specific vocational training which considerably narrows their range of choices.

Few systematic studies of identity have used high school subjects and there have been no developmental studies of this age range. (Offer,

et al, 1970 and Douvan & Adelson, 1966 were not primarily concerned with identity formation). Of course it would have been desirable to include a post-high school sample of subjects but it would have been extremely difficult to secure a representative sample.

From the developmental point of view a longitudinal study would have yielded the most useful and reliable data especially as identity formation is probably not linear and there seem to be no 'universal' patterns. However, this was not feasible and it was decided that a cross-sectional design should be used with an analysis of age trends. In order to obtain normative data this meant that reasonably large samples of subjects would have to be tested.

As identity formation is such a complex, multi-dimensional phenomenon it was obvious that a multivariate approach would be the only adequate one. Most of the previous studies have been too narrow or superficial in their data collection. A technique such as that devised by Prelinger & Zimet (1964) would undoubtedly have yielded the richest and most adequate data and analysis in a study such as this. But for large samples this method would have been completely impractical under the circumstances (it would require a well-trained team of research workers). It was decided that the paper-and-pencil questionnaire method should be used as it can be administered in a group setting. The questionnaires would be designed to yield as much data on relevant variables as possible. While this method is more objective than an interview technique it is also a less adequate method for obtaining the type of data one would need in a

study of identity such as quality and degree of ego integration, degree of ego autonomy. It is likely to create less anxiety in the respondent than an interview but the problems of response set and faking are difficult to overcome.

The most practical procedure was to enlist the co-operation of an average (representative) high school so that the questionnaire could be administered in the classroom setting. This has its limitations too as high schools are generally reluctant to give up too much teaching time and therefore the questionnaires had to be kept as short as possible. Two school periods (approximately $1\frac{1}{3}$ hours) for each group was considered a reasonable request. Secondly, one has less control over the selection of subjects if a predetermined class group is used as the basic sampling unit (this became a problem in this study) but it also tends to eliminate possible bias.

Apart from the analysis of age trends in the data, theory and research have indicated the necessity for considering various types of identity formation. It was therefore decided that suitable data should be obtained which would allow for the classification of each subject according to the type or stage of identity formation. Six basic categories were defined on the basis of Erikson's writings and on previous research (Prelinger & Zimet, 1964; Marcia, 1966 - see Appendix A-1).

Firstly, we have to consider three hierarchial stages which may be encountered in the age range we are dealing with:

(I) Pre-Moratorium stage: Some of the younger subjects may not have entered the identity stage (Erikson's fifth stage) but still be in the previous stage (Industry versus Inferiority). These subjects have an identity but they have not begun to differentiate it. Thus they have

not begun to experience the typically adolescent identity problems and their world is still that of childhood: the family, school and immediate neighbourhood. They are probably unselfconscious, emotionally (and physically) dependent on their families, unrealistic in their vocational plans and relatively immature in their social relationships and ideas (but not necessarily maladjusted).

(II) Moratorium or experimental stage: These subjects are engaged in resolving identity problems, in breaking dependency ties with their families and other adults, and in role experimentation and preparation for a future vocation. They might express tentative commitments (e.g. to a vocational choice) but they might also be in a state of mild confusion. They are self-conscious, and they are concerned about resolving identity issues (e.g. sexual identity, vocational identity). In contrast, the individuals in the 'Pre-Moratorium' stage show no concern with these issues.

The Moratorium stage ends in late adolescence when the individual is faced with making final choices and commitments and is expected to assume adult responsibilities. The identity crisis (turning-point) is reached and he enters the third stage.

(III) We might call this the 'Outcome' stage. There are three possible outcomes of the identity crisis:

(a) Identity-Achievement, i.e., the establishment of a more-or-less stable and autonomous sense of identity. Individuals in this category have experienced a period of experimentation and active consideration of realistic alternatives for their futures; they have resolved major identity problems so that they know what direction they wish to take

(and are capable of taking), and they are committed to, or willing to commit themselves to, certain choices (e.g., vocational). They have established their emotional independence from others and have resolved conflicts with authority figures; and they have achieved an ego integration and sense of 'wholeness' which leaves them free to act and able to cope with changes in their environment.

(b) Identity-Confusion: This results when the identity crisis cannot be resolved. Individuals in this category feel isolated, worthless, extremely self-conscious, and anxious. Decision-making and useful activity is paralysed by too many conflicts, they lack a feeling of sameness and continuity, and they lack ego integration.

(c) Negative-Identity: Individuals in this category have resolved the identity crisis by choosing an anti-social, totalistic identity (such as delinquency). They reject parental values and social norms, and they are psychologically maladjusted: they avoid identity confusion by regressing to an earlier level of ego integration. (It is unlikely that one would encounter any negative identities in a normal high school population but provision for this category should be made).

Yet another type of identity development which must be defined is the Foreclosed or defensive identity. These individuals avoid a confrontation with identity problems by prematurely consolidating their identities and uncritically adopting those roles and values which are deemed desirable by their parents and society. They do not achieve any real independence, their identity is constricted, and their character structure is rigid and defensive. The degree of rigidity and defensiveness will depend on how early ego development became fixated. Thus some individuals

will have foreclosed their identity formation during the Pre-Moratorium stage and some may foreclose their identities during the moratorium stage (as implied by Adelson, 1964). But it was felt that these distinctions would be too difficult to make from the data available in this study.

A major criticism of previous studies was that they dealt with 'self-identity' rather with 'ego-identity'. It will be recalled that the former refers to the conscious aspects of identity formation (such as ideological commitment, vocational choice, self-image, role integration) while the latter refers to the unconscious aspects of ego synthesis. It is almost impossible to 'measure' ego-identity using a self-report questionnaire technique so that this study also tends to focus on self-identity. However, it was hoped that sufficient data could be obtained to make some fairly valid inferences about ego integration possible.

Identity formation refers to the psychosocial aspect of ego development during adolescence. This study aimed to obtain data on relevant psychological variables (such as self-esteem and problems), on social variables (peer and parental relations) as well as on the more conscious aspects of identity (vocational choice, values). Of course these three elements cannot really be separated. The variables which were considered relevant to identity formation will now be discussed.

Variables relevant to sample selection: The sample of subjects is always an important aspect of any developmental study but this is especially the case in a study of identity because socio-cultural factors have a strong influence on identity formation.

(1) Cultural factors: In a multiracial society where there are at least three distinct cultural groups within the dominant white ethnic group the cultural background of the sample must be specified. It was decided that the sample should be restricted to one cultural group, i.e., white English-speaking gentile South Africans, because the English-speaking, Afrikaans-speaking and Jewish cultural groups differ in certain respects which might have important consequences for identity formation. The Jewish group, which is fairly distinct and cohesive, does have a certain minority group status (in the sense that Erikson uses this term) and therefore Jewish adolescents are likely to experience atypical identity conflicts. Although this group merges to some extent with the English-speaking group it was decided that Jewish pupils should be excluded from this study.

The Afrikaans-speaking group is still fairly unsure of its own group identity and it is much more ideologically inclined than the English-speaking group. It offers its youth a well-defined rigid ideology (political and religious) which does not encourage much independent thought. Thus identity formation in this segment of the youth is also likely to be atypical. The English-speaking group, on the other hand, is more permissive, materialist in value orientation, and less concerned with ideological matters (both political and religious). This segment of youth possibly resembles their American counterparts more closely than the European youth* insofar as they nearly all belong to the middle (or upper) class and have almost unlimited educational opportunities with little competition in the

* This comparison is based on McNassor's analysis and comparison of the social structure in America and Western Europe (1967).

educational and vocational field. Children are indulged and not expected to help with domestic chores, and teenagers are given considerable behavioural freedom and are not expected to contribute to the family income.

The English-speaking group are not explicitly authoritarian but racial prejudice and "white supremacy" are generally accepted social norms (Orpen, 1971). In an authoritarian culture one might expect a higher incidence of foreclosed identities but Orpen has cautioned against the inference of underlying pathological personality factors from expressed 'authoritarian' views and prejudice in a culture where such views are socially acceptable. English-speaking South Africans are likely to be conformist rather than totalitarian (in the Eriksonian sense) but one should bear in mind the possible effects of authoritarianism on identity formation.

(2) Socio-economic status: Little work has been done on the effects of socio-economic status on identity formation. Values differ among social classes, and the upper-middle class youth is likely to have more opportunities open to him than the lower-class adolescent. This may make the achievement of a sense of identity more complicated for youth from the upper strata but the lower-class youth is more likely to be frustrated in his goals.

It was decided that the sample should be representative of the socio-economic range although it was unlikely that it would include any subjects with a working-class (unskilled and semi-skilled) background. The school situation would give some indication of the general socio-economic status of its pupils, and the subjects were required to give

their father's occupation so that a rough indication of status could be obtained.

(3) Age groups: It has already been mentioned that this study should cover the age range 12 to 18 years, (i.e. the entire high school period), and the group testing procedure required that the basic school groupings into classes within standards should be the basic sampling unit. Three main groups - early (Std. 6), middle (Std. 8) and late (Std. 10) - were considered sufficient to cover the basic age range, although the actual age distribution would cluster around 13, 15 and 17 years. It should be noted that this would correspond with the three phases of adolescence outlined by various theorists and it might facilitate data analysis (group differences).

Each school standard is usually divided into four or five classes (about 30 pupils in each) based on academic performance or school curriculum. In order to ensure a developmental continuum between the three groups it was decided that in the Std. 6 and 8 groups only those classes containing a majority of pupils academically capable of reaching Std. 10 should be included in the study. This technique would exclude the lower range of intelligence and thus the samples would only be representative of the I.Q. range above 100. Samples of approximately 50 subjects in each group (some 30% of an average high school population) were envisaged.

Sex differences: Almost all the previous studies have tended to limit their samples to one sex group. Douvan & Adelson (1966) make a strong case for differences in the development of a sense of identity.

It is readily acceptable that boys' and girls' identities will differ in content and focus but is the actual process of identity formation different? The above authors and Heilbrun (1964) suggest that for women the husband's identity is an important aspect of their own and that they keep an 'open' identity until such time as they are chosen to be a wife by some man. Erikson disagrees and implies that the young woman's identity largely determines whom she cares to be chosen by. He also suggests that for many girls the moratorium is a time for experimentation with more traditionally 'masculine' activities. It is also possible that girls might develop earlier or at a different rate from boys.

In order to investigate sex differences in identity formation the samples would have to include both boys and girls. Therefore it was decided that the samples should be drawn from a co-educational school so that the male and female samples would be comparable as regards socio-economic background.

Relevant variables to be measured:

(1) Identity: No really suitable measure of identity has been designed - especially one suitable for the measurement of identity development. All the available measures tend to assess whether the identity crisis has been resolved successfully or not, and they have all been devised for use with older subjects (college students, naval recruits). Rasmussen's Ego Identity Scale (1961) seemed to be potentially the best instrument available. The items are based on Erikson's description of the manifestations of identity confusion and on his theoretical formulations concerning the contributions of the first four psychosocial crisis stages to the adolescent identity

conflict (see Part I, section 4). It covers many of the relevant aspects of the identity conflict as outlined by Erikson.

In contrast, Dignan's Ego Identity Scale (1965) appeared to be rather more limited in scope and it is not directly based on Erikson's writings (many of her items were based on other writings on identity). It seems to measure 'self-identity' while Rasmussen's scale taps behavioural aspects as well as opinions and self-evaluations.

The Wessman & Ricks Q-sort measure (1966) was rejected because of its weakness in construction (Constantinople, 1969), and Marcia's Ego Identity Incomplete Sentences Blank (1966) cannot be objectively scored. The details concerning the Hess-Henry-Sims semantic differential technique were not available to the present author. It was devised for a research project entitled "The Actor in America" at the University of Chicago (1958 - unpublished). The Simmons Identity Achievement Status Scale (1970) was not available when the research was planned.

The Rasmussen scale has very definite limitations which are discussed in section 5 and this is part of the reason why the measurement of so many other variables was considered necessary - so that sufficient data would be available to classify the subjects according to the various types and stages of identity formation which have been defined without having to rely too much on the Ego Identity Scale scores.

(2) Peer Nomination Form: It was envisaged that most of the data would be obtained by self-report questionnaires which are subject to faking and response set. It was therefore decided that an 'external'

measure of some aspect of identity formation (e.g., psychological and interpersonal adjustment) should be incorporated in the research design to increase the reliability of the data.

As the questionnaires were to be administered in the classroom setting the peer nomination technique was the obvious choice. Teacher ratings⁹ were an alternative choice but peer ratings have generally been found to be more reliable (Anastasi, 1968; Cronbach, 1960). The peer group provides a large number of raters so that 'halo effects' tend to be minimized, and peers are more likely to see the 'natural' behaviour of their classmates as well as a wider range of behaviour than their teachers. However, a certain degree of sophistication has to be sacrificed because school children are not trained in making rating judgements or in making fine discriminations. But the technique has been used successfully in a number of studies and even with very young subjects.

The peer nomination technique requires each subject to nominate those of his peers who fit the item descriptions. The items are usually arranged in positive and negative pairs reflecting either end of the continuous personality traits which one wishes to measure. Therefore those subjects whose behaviour is characteristic of the middle range of the continuum tend not to get nominated and so this technique is not very sensitive to individual differences in the middle range.

(3) Vocational Plans: According to Erikson 'vocational identity' is often a central component of an overall sense of identity in men particularly (supported by Douvan & Adelson, 1966) but Hershenson (1967) has raised some complicating factors. It was decided, therefore,

that the relationship between vocational choice and identity formation should be further investigated. Data on vocational plans would also be useful in making the identity classifications (it was one of the criteria used by Marcia, 1966).

(4) Problems: A considerable amount of research has been done on adolescent 'problems' but on the whole little attempt has been made to relate the findings to any theoretical framework. By investigating the relationship between typical adolescent problems (found in empirical studies) and identity formation it was hoped that some integration of theory and research might be achieved. If identity formation is the major psychosocial task of adolescence as Erikson suggests, then the 'typical' adolescent problems discovered in empirical research should be related to identity formation, and one could hypothesize that individuals who are confused about their identities would be experiencing many of these problems, while individuals who have established their identities would have resolved these problems.

(5) Value Patterns: Based on Mogar's interesting research (1964) it was reasonable to expect that subjects with different types of identity would endorse different patterns of values and this might yield additional insights into the process of identity formation. Values are an important concomitant of identity which is not tapped by the Rasmussen Ego Identity Scale. Secondly, the assessment of attitudes towards activities such as drinking, stealing, drug taking might help to identify subjects choosing a negative identity.

(6) Self-esteem: A realistic self-esteem is generally accepted as the mark of sound ego development and Erikson specifically links the development of self-esteem with identity formation (1968, p. 49 and 71).

Theoretically one would expect that the establishment of a healthy sense of identity would be accompanied by an increase in self-esteem. The results of research (Marcia, 1966, 1967; Marcia & Friedman, 1970) have been equivocal and it was hoped that the present study would clarify the relationship between self-esteem and identity formation.

Self-esteem, however, is a complex quality and difficult to measure. Coopersmith's study of pre-adolescent boys and girls has clarified some of the issues involved in measuring self-esteem (1959). He found that some subjects obtain unrealistically high scores on a self-report measure of self-esteem which he interpreted as defensive self-esteem. This may be characteristic of foreclosed identities (suggested by the results obtained by Marcia & Friedman, 1970).

(7) Authoritarian Submission and Conventionalism: The Marcia studies have consistently found that subjects classified as Foreclosed received significantly higher scores on the California F-Scale items which measure attitudes reflecting 'authoritarian submission' and 'conventionalism' (middle class values), and one would expect this on theoretical grounds. It was therefore assumed that this measure could be used as a criterion for the Foreclosure classification.

(8) Elation-Depression and Mood Variability: Wessman & Ricks (1966) found that happy subjects manifested a stronger sense of identity than unhappy subjects, and they also found that self-report scores were considerably influenced by the subject's mood state. Subjects were more critical about themselves when the questionnaires were completed in a depressed mood. This factor may considerably influence the responses in this study (especially on a measure of self-esteem). Extreme mood variability, on the other hand, might be expected to relate to identity confusion.

(9) Peer Relations: Individuals with a shaky sense of identity find interpersonal relationships potentially threatening and tend to withdraw from close contact with others according to Erikson's theory. It was therefore felt that indices of sociability and popularity (sociogram) would be useful in this study.

(10) Parent-child Relations: Conflict between adolescents and their parents has been considered an almost inevitable concomitant of the adolescent process by the psychoanalytically-oriented theorists. Douvan & Adelson (1966) and the social learning theorists (Bandura, 1969) have found that this is not the case for many adolescents. Nevertheless it may be found that poor parent-child relations exist in those cases who manifest some degree of identity confusion suggesting a possible aetiological factor. Much has been written about the breakdown in communication between adolescents and their parents (the generation gap) and it was felt that this should be investigated.

(11) Behavioural Conduct: Adolescents who are attempting to establish their independence (Moratorium type) and those who are opting for a negative identity would be expected to display rebelliousness. Identity-achievement subjects, on the other hand, should have resolved their problems with authority. Therefore this variable was also considered relevant to this study.

(12) Physical Maturation: Studies of 'early-maturers' and 'late-maturers' have found that the former tend to develop more successfully than the latter, whose psychological development is often

impeded and sometimes permanently affected in an adverse way (Mussen & Jones, 1965; Jones, 1957; Jones & Bayley, 1953). Although identity formation is the psychosocial aspect of adolescent development it is influenced by physical development according to Erikson and this aspect cannot be overlooked. Therefore a rough index of physical maturation should be included in this study.

(13) Academic performance and I.Q.: The former has been found to be related to identity formation while the latter appears to be unrelated. Both could be obtained from the school records.

(14) Home background and other factors: Deaths, divorce or separation in the family; truancy, stealing and under-achievement in school; and physical handicaps may all be relevant to identity development, and it was hoped that the teachers might be able to provide some information on these factors.

In order to collect adequate data on all the above variables a very extensive series of questionnaires would have to be completed by each subject. Because of the time limitation a decision had to be made as to whether the number of variables should be reduced or the length of the questionnaires reduced. It was felt that in a study of identity formation the wider the range of data the more effective the investigation would be as identity formation is the ventral and pervasive feature of adolescent development according to Erikson.

Therefore it was decided not to eliminate any of the variables but preference was given to those which seemed to be more important.

Thus variables (8) through (12) were only crudely assessed by 5- or 6-point rating scales, although many items in the longer questionnaires reflect these variables as well. As regards parent-child relations, which is an important variable, an item on the Problems Scale reflects parent-child conflict. The rating scale was designed to reflect degree of parent-child communication. A thorough investigation of the effect of parent-child relations on identity formation would require detailed study which was beyond the scope of this research. Nevertheless it was hoped that the crude assessment of parent-child relations in this study might provide suggestive data which would be useful in planning a more comprehensive investigation of this aspect.

3. Hypotheses and Criteria for Identity Classifications

In order to investigate the various factors involved in the development of a sense of identity the data will be analysed in two ways: firstly, by using the Ego Identity Scale scores as an operational definition of Erikson's concept of ego identity (high scores) versus identity confusion (low scores); and secondly, by classifying the subjects on the basis of the data obtained according to the six types or stages of identity formation which have been defined. As this second part of the study is exploratory the formulation of hypotheses was confined to expected relationships between ego identity as measured by the Ego Identity Scale and other relevant variables. The rationale behind these hypotheses has already been covered in the preceding discussion.

Hypotheses:

- (1) Scores on a measure of ego identity will increase significantly with age and/or school standard, thus demonstrating a developmental trend in identity formation during the adolescent period.
- (2) There will be no significant difference between male and female adolescents in their scores on a measure of ego identity.
- (3) Scores on a measure of ego identity will be positively related to scores on the peer nomination measure.
- (4) Scores on a measure of ego identity will be positively related to scores on a measure of self-esteem.
- (5) Scores on the measure of ego identity will be negatively related to composite scores based on the number and degree of problems reported.
- (6) Scores on a measure of ego identity will be positively related to academic performance within school standards. The rationale being that subjects who are resolving their identity conflicts successfully will have a greater amount of psychic energy available for intellectual pursuits than subjects who are beset by psychic conflict.

A host of more or less intuitive hypotheses might have been made. The general approach adopted was not so much "Does the data confirm the hypotheses?" but rather "What does the data reveal about the development and psychological functioning of these subjects?". And secondly: "Does Erikson's theory of adolescent development account for these findings?". This required an extensive analysis of all the data: age, sex and socio-economic differences as well as inter-relationships among the variables.

Identity Classifications:

It was anticipated that the Ego Identity Scale would be too gross a measure to account for the complexity of identity formation or for the variance encountered in the data, and it was hoped that different patterns of scores would be found which could be explained in terms of the various types and stages of identity formation which have been defined.

An attempt was made to establish specific criteria in terms of expected patterns of scores on relevant variables for each classification on the basis of Erikson's theoretical formulations and previous empirical research. The criteria are given in Table 2.1. Only those scores or response patterns which could be predicted with some certainty were used as criteria but even some of these are questionable (identified by a '?'). The criteria are listed more-or-less in order of certainty for each identity category.

TABLE 2.1: Criteria for Identity Classifications.

- (1) Identity-Achievement: High scores on the Ego Identity Scale.
 High self-esteem (low scores on the Janis-Field Scale).
 High scores on the Peer Nomination Form (I).
 Commitment to a considered, realistic vocational choice.
 Resolution of major problems relating to identity.
 Relatively low scores on the F-scale items.
- (2) Moratorium: Moderate scores on the Ego Identity Scale.
 Average self-esteem scores (Janis-Field).
 Average Peer Nomination Scores (I).
 Concern with vocational choice, possible tentative commitments.
 Average problem score, some may be resolved.
- (3) Identity-Confusion: Low scores on Ego Identity Scale.
 Low self-esteem (high Janis-Field scores).
 Low scores on the Peer Nomination Form (I).
 Lack of commitment to vocational choice (confusion).
 Many problems reported (high score), depressed.

- (4) Foreclosed: High score on F-Scale items. (Main criterion).
 (Defensive) Commitment to a vocational choice (unconsidered).
 Few problems reported (defensive).
 Relatively low Peer Nomination Form scores (?).
 Relatively high self-esteem (defensive - ?).

As Foreclosed subjects have a defensive ego-synthesis one might expect them to distort the information reported in order to appear in a more favourable light. However, this will probably depend on the degree of maladjustment present, and on the degree to which they are accepted by their peers. Response set is most likely to be found in this group, however, and allowances must be made for this.

- (5) Pre-moratorium: Lack of commitment and concern re vocational choice or unrealistic commitment (unconsidered).
 Few problems reported.
 High self-esteem (low Janis-Field scores), happy.
 Relatively low Ego Identity Scale scores (?).
 Average Peer Nomination Form scores (I).

- (6) Negative-Identity: Low Peer Nomination Form scores (I).
 Atypical values.
 Poor conduct in school (rebellious).
 No commitment (or concern) re vocational choice (?).

It is extremely difficult to predict how this group would score on most of the measures used, and they may also distort the information given.

But it must be emphasized that these criteria could not be used as the sole basis of classification. There are two main reasons for this: firstly, the criteria are mainly hypothetical because of the general absence of relevant research. The main criterion for the Foreclosed classification (high scores on the F-Scale items) was based on the findings of the Marcia studies (1966, 1967, 1970). Marcia & Friedman (1970) also found that subjects classified as Foreclosed (females) tend to obtain high scores on a self-esteem measure but the research using measures of self-esteem has generally yielded equivocal results (e.g., Marcia, 1966, 1967). The criteria concerned with vocational choice (for the first four categories) have also been taken from Marcia (1966).

The remainder of the criteria were based on Erikson's writings and logical deduction. Erikson has only described in detail the manifestations of a sense of identity (i.e., 'Identity-Achievement') and identity confusion. Thus the criteria for these two categories rest on fairly firm ground. But Erikson's writings are not very explicit about the characteristics of adolescents in the Moratorium stage, nor about the characteristics of Foreclosed or Negative identities, and there were virtually no guidelines for the criteria for the 'Pre-Moratorium' category. Thus many of the criteria may prove invalid.

A point which is not made explicit in Table 2.1 is that one would expect quite a wide range of adjustment among subjects classified as Pre-Moratorium, Moratorium and Foreclosed, and so one might find quite a wide range of scores in these categories on some of the measures, e.g., the Problems Scale, Janis-Field Scale and possibly on the Ego Identity Scale.

The second problem results from the fact that most of the measuring instruments used in this study are still in the process of development and therefore have no proven validity, and some of them are easy to fake. Most of the criteria involve scores or response patterns on the following measures (which are described in detail in section 5):

- (1) The Ego Identity Scale, which was designed to assess the outcome of the identity crisis: a sense of identity versus identity confusion; and no research was available on how subjects in the other categories would respond on this scale.
- (2) The Janis-Field Feelings of Inadequacy Scale, which was used as a measure of self-esteem. It was considered suitable because it was designed for use with early adolescents and it has been used quite extensively. But self-esteem is a vague concept and the Janis-Field Scale has been found to correlate negatively with measures of dominance and positively with the Rokeach Dogmatism Scale (Hamilton, 1969).
- (3) The Peer Nomination Form, sub-scale I, which was designed for this study and seems to reflect the identity versus identity confusion continuum but its validity is still to be proven.
- (4) The Problems Scale, which was also designed for this study. The items describe different adolescent problem areas discovered in empirical research and scores are based on the number of problems checked along an intensity continuum: Not a problem, Resolved, Minor, Moderate, or Major problem. Low scores reflect few problems checked and high scores reflect many problems but the scores do not give any indication of the content of the problems. The criteria concerned with scores on this scale are purely hypothetical.

- (5) The F-Scale items, which reflect 'authoritarian submission' and 'conventionalism' (middle-class values).
- (6) The Vocational Plans Questionnaire, which is an open-ended questionnaire designed for this study to provide data on 'vocational identity'. But it is a crude instrument and only provides rather superficial information.

Because of the hypothetical nature of the criteria it was decided that the criteria should be used as a guide in making the identity classifications. The criterion measures only provide some of the information available for each subject, and because of the dubious validity of these instruments it was decided that individual scores should be interpreted in the context of all information available for a particular subject, i.e., the total configuration of scores and responses should be assessed so as to gain some intuitive understanding of the overall psychological functioning of the individual subject in terms of Erikson's theory.

4. Pilot Study.

All the measuring instruments were pretested in a pilot study of 54 subjects in a small town co-educational school. Most of these subjects came from a rural background (in contrast to the main study where the sample was drawn from a large urban community) but they were all White English-speaking Gentile South Africans. The sample consisted of boys and girls from Std. 6 and Std. 10 (the middle group of Std. 8s was omitted). The numbers in each sub-group were as follows:

	<u>Males</u>	<u>Females</u>	<u>Total.</u>
<u>Std. 6:</u>	18	7	25
<u>Std. 10:</u>	<u>14</u>	<u>15</u>	<u>29</u>
<u>Total:</u>	32	22	54

Procedure: All the questionnaires were administered in a single session to the Std. 6 and Std. 10 groups separately. The investigator briefly explained to the groups what the questionnaires were all about, assured the subjects that their responses would be confidential, and made a plea for honesty.* The subjects were encouraged to ask questions and to ask for explanations at any time, and a generally permissive atmosphere was allowed to prevail in the classroom although too much talking was discouraged. The investigator wished to gauge the reactions of the subjects to the various questionnaires. On the whole the co-operation was very good.

* In the main study this 'introduction' was written out and attached to the main questionnaire so that each subject could read it. A copy of it is presented in Appendix A-3.

The Ego Identity Scale (with a separate answer sheet) was administered first, and the Peer Nomination Form last. The rest of the questionnaires and rating scales were arranged in one duplicated booklet in the order presented in the next section and this was completed after the Ego Identity Scale. Queries and reactions were noted, and the time to complete each questionnaire was recorded.

Results: The data obtained in the pilot study was analysed in order to determine the efficacy of the various measuring instruments employed and this is presented in the next section. On the whole the research design seemed to be adequate but a number of the measures required minor modifications. Unfortunately no data could be obtained from the teachers. The Ego Identity Scale data was not very satisfactory indicating that the scale has severe limitations. It was difficult to determine what this scale is actually measuring, but this is discussed in greater detail later.

Identity Classifications: It was possible to classify the data according to various different patterns which more or less fit the criteria and definitions of the various types and stages of identity formation. A large amount of data was available on each subject and the criteria were used only as a guide. Firstly, the data for each group (Std.) was viewed as a whole and arranged according to the various patterns of scores which were apparent. Secondly, the total data profile of each subject was examined in order to obtain some intuitive feeling of his overall psychological functioning. On the basis of the criteria, the overall patterns for the groups and the individual configurations of responses, the final classifications were made. Each subject's classification and the raw data on the major variables is presented in Appendix A-2.

The data of the Std. 6 subjects was rather baffling in some respects, and on the whole there was a large proportion of Foreclosed classifications. This may be due to the fact that the subjects were from a rural background which is more likely to be authoritarian. The Std. 6 subjects in the Foreclosure category fell into two distinct groups: Group (1) obtained unexpectedly high EIS scores, relatively high Peer Nomination scores, reported few or no problems, manifested high self-esteem, and they all expressed vocational commitment. Group (2) obtained lower scores on these measures, especially self-esteem, and expressed less certainty as regards vocational choice.

The two groups were alike in that they obtained very high scores on the F-scale items indicating an acceptance of authority and middle-class values, and they also endorsed the typical value patterns which are highly acceptable (socially): academic achievement, religion, being with the family, and helping other people. (See Appendix B-5c) ^{Tables 3+4} The first group seemed to be relatively successful in general, sure of their goals and without problems. Some of the subjects in this group could have been classified as 'Pre-moratorium' if the high F-Scale scores are interpreted as acceptance of social norms. With the development of independence later and the establishment of an individual identity they might be less willing to agree with these F-Scale items. On the other hand, the high scores obtained on the self-report questionnaires may have been due to defensiveness which is characteristic of the Foreclosed position. The second ^{group} seemed less successful and therefore concerned about their opinion of others (which is what the Janis-Field Scale measures to a large extent). There were only two subjects in this group which seemed to be both maladjusted and defensive.

The Std. 10 subjects classified as Foreclosed had a similar pattern of scores to the second Std. 6 group described above. It was found that no subjects could be classified as Identity-Achievement with any certainty, but there were some Std. 10s who seemed to be moving towards the establishment of a sense of identity. These were classified as 'Moratorium→Achievement' (making commitments and resolving conflicts). Similarly no subjects could be classified as Identity-Confusion (pathological outcome of the identity crisis) but a number of subjects manifested a certain degree of confusion. These subjects were probably experiencing a slightly aggravated identity crisis but one could not predict from the data whether they would resolve the crisis successfully or not. Therefore it was decided to classify these subjects as 'Moratorium→Confusion'. The classification, Moratorium, was used for those subjects who seemed to be forming an identity without undue conflict. The Moratorium patterns in both groups conformed to expectations by and large.

Two Std. 6s were classified as Pre-moratorium but they had rather high EIS scores. It is difficult to predict how Pre-moratorium subjects would score on the Ego Identity Scale. If they have not yet encountered the identity problems which the Scale taps then they may well obtain high scores.

5. MEASURING INSTRUMENTS.

(1) Ego Identity Scale (EIS):

This instrument was devised by Rasmussen (1961) as "a technique for investigating Erikson's concept of ego identity".

"The scale was not developed as a formal psychological test or 'diagnostic' instrument; rather, it is intended to provide a means of evaluating the adequacy with which the various psychosocial crisis conflicts have been resolved. This is approached by assessing, through a series of statements setting forth attitudes and overt behavioural responses, whether the subject's response to the derivatives of the criteria of psychosocial health for each crisis period is positive or negative." (Rasmussen, 1961, p. 72).

The original scale consists of 72 items divided into sub-scales based on the first six psychosocial crisis stages outlined by Erikson. Subjects are required to indicate whether they generally agree or disagree with each item. Half the items are cast so as to elicit positive responses (agree) and the other half, negative responses (disagree). The items are presented in a random order.

Development of the original scale: Rasmussen selected three "derivatives of the criteria for health and ill-health ... for each of the first six psychosocial crisis stages" from Erikson's writings. (1961, p. 72). He does not specify the criteria used in this selection but he does give the page reference for each 'derivative'. The specific references are "The Problem of Ego Identity" (1956) and "Growth and Crises of the 'Healthy Personality'" (1950). Both of these articles were reprinted in Erikson (1959). The 18 derivatives and their references are presented in Appendix B-1 (b) along with the items for each derivative.

Eight items reflecting in a "concrete or literal manner" each of the eighteen derivatives were prepared by Rasmussen and submitted to two independent judges. They were required to sort the items according to the 18 derivatives in order to determine content validity and eliminate ambiguity. Only seven items proved to be ambiguous and they were revised so that they could be properly categorized.

Two preliminary forms of the test were constructed by placing 4 items (two positive and two negative) reflecting each derivative in each form. Thus each scale consisted of 72 items which were randomly ordered. They were then administered to two separate groups of approximately 100 incoming naval recruits. The frequency of agree and disagree responses for each of the items was tabulated. Items were rejected immediately on the basis of two criteria: (1) if they were responded to by 95% or more of the subjects in the same direction (poor discrimination);* and (2) if they were responded to by the majority of the sample in a direction contrary to expectations. Only 19 items were rejected under these criteria.

The final scale consisting of 72 items was prepared from the remaining items on the basis of two considerations: (1) wherever possible, two positive and two negative items were chosen for each derivative to avoid response set; and (2) "by inspection, an effort was made to select those items which were the simplest and most direct

* 95% is an extremely high figure to use as a criterion for item rejection. The maximum differentiation is given by items which are passed by approximately 50% of a standardization sample (Anastasi, 1968, p. 164). These criteria of Rasmussen's mean that those items which were responded to in the expected firection (i.e., passed) by between 50% and 95% of the sample were retained. An item which is passed by 80% or more of the sample does not have much discriminatory power.

in content" (Rasmussen, 1961, p. 77). He contends that the socially desirable response is not readily apparent without references to Erikson's theory.

Reliability: The final form of the Ego Identity Scale was administered to two samples (100 subjects in each) of new naval recruits, and the reliability for each sample was estimated by the split-half method, using the Spearman-Brown formula. This yielded correlation coefficients of .849 and .851, which were considered to be quite satisfactory for an instrument of this type (Rasmussen, 1961, p. 78).

Validity: The content of the scale is defined by the 18 'derivatives' on which the items are based. There is evidence that the content validity of the items is reasonable, i.e., that the items do reflect the derivatives they are supposed to measure (the few exceptions will be discussed later). However, the validity of the derivatives was never considered. Rasmussen assumed that the validity of the derivatives could not be questioned because they are "specifically set forth by Erikson in his writings". A careful examination of the derivatives and the page references given for each by Rasmussen found no specific references for derivatives 5 and 10 although these are in line with the 'spirit' of Erikson's theory. Derivative 9, however, misinterprets Erikson's writings (and the validity of the items is questionable). (See Appendix B-1 (b).

The most serious problem concerns the arrangement of the derivative according to the first six psychosocial crisis stages (resulting in six sub-scales). The problem concerns the interpretation of the Ego Identity Scale scores (particularly the sub-scales) and it

is essentially a theoretical problem. All the derivatives (except 2 and 9) were taken from Erikson's description of the 'syndrome' of identity confusion and his discussion of the horizontal V of the Epigenetic Chart while the fifth sub-scale derivatives were taken from his descriptions of the basic manifestations of ego identity, i.e., from "The Problem of Ego Identity" (reprinted 1959).

At face value, then, the scale seems to be concerned with the various aspects of the identity conflict and it is arranged in such a way that the first four sub-scales reflect issues relating to the earlier psychosocial stages. Rasmussen assumed that scores on these sub-scales would reflect the degree of positive or negative resolution of the respective earlier psychosocial crises. He says:

"... it is possible to study systematically the resolution of earlier crisis periods through presently-manifested attitudes and behaviour rather than by attempting to reconstruct the individual's actual psychological relationships to significant persons in his environment from infancy through adolescence" (1964, p. 816).

It is suggested that this is a misinterpretation of the epigenetic principle on which Erikson's theory rests. It is an atomistic approach to development which fails to consider the reciprocal interaction between all components of the personality. For example, it suggests that the ratio between Basic Trust and Mistrust which is established in infancy remains fixed and will be reflected in the Time Perspective versus Time Confusion issue during the adolescent period. According to the present author's interpretation of the epigenetic principle, the outcome of the earliest psychosocial crisis will influence all subsequent development, and it will in turn be influenced by all subsequent experiences as it continues to be differentiated.

Thus it is possible that a once positive ratio of Trust: Mistrust may become a negative ratio as a result of adverse experiences in later development, just as a negative ratio may also be reversed by favourable experiences. It seems doubtful whether one can make any assumptions about the resolution of earlier crises from later developments, although one might be able to trace disturbances back to earlier conflicts if the life history is known. Unfortunately Erikson is not very clear on the relationship between the horizontals of the chart, but he seems to consider Time Confusion, Self-consciousness, Role Fixation and Work Paralysis to be 'symptoms' of Identity Confusion, which may involve regression to earlier developmental crises in extreme cases.

The theoretical issues involved here are too complex to discuss fully but they must be considered when evaluating some of Rasmussen's findings. For instance, he hypothesized that individual's manifesting passive-dependent behaviour would obtain significantly lower scores on the second sub-scale than on any of the other sub-scales thus demonstrating a disturbance in the second psychosocial stage. It was not supported. The fact that a disturbance in the second stage might have adversely effected all subsequent development, and hence all scores on the EIS, was not considered by Rasmussen.

We noted earlier that all the derivatives were taken from Erikson's article on "The Problem of Ego Identity" (reprinted 1959) except 2 and 9. Derivative 2 (Interpersonal Trust) reflects more concretely Stage I issues than Identity issues which is, unfortunately, out of keeping with the rest of the scale. Derivative 9 (sub-scale III) is supposed to reflect 'tireless initiative' which is characteristic

of identity foreclosure at the third stage according to Erikson. Rasmussen's derivative, however, does not truly reflect Erikson's description of this condition. (See Appendix B-1 (b)). And the items seem to reflect a disturbance in planning ability rather than 'tireless initiative'. This could be related to a disturbance in time perspective, in a sense of purpose (derived from the third stage), or in the sense of industry.

The meaning of the sixth sub-scale is rather ambiguous. The derivatives do not reflect V-6 of the Chart (Sexual Polarization versus Bisexual Confusion), but were drawn from Erikson's introduction to the 'syndrome' of Identity Confusion entitled "The Problem of Intimacy". The sense of isolation (reflected in derivative 16 and 18) has been described by Erikson as a symptom of Identity Confusion, while the inability to 'repudiate judiciously' (17) is the result to an "incomplete identity" (Erikson, 1968, p. 168). At face value this sub-scale seems to assess whether the identity crisis has been resolved successfully or not, rather than whether intimacy has been successfully established or not (6th stage). On the other hand, it may reflect the development of identity during the sixth stage (Solidarity versus Social Isolation). * The scores on this sub-scale could be omitted from a total 'ego identity' score as Rasmussen did.

* Erikson (1959) placed 'Solidarity versus Social Isolation' in the fifth column of the sixth row in the original Epigenetic Chart, but he omitted it in the revised Chart (1968).

It might be concluded from an examination of the content of the Ego Identity Scale that it is primarily concerned with ego identity issues and that the first sub-scales, at least, reflect identity issues relating to five dimensions in personality development during the adolescent stage. The scale does not, however, tap those aspects of identity represented in the last three 'boxes' in horizontal V of the Epigenetic Chart: Sexual Polarization versus Bisexual Confusion (V-6); Leadership and Followership versus Authority Confusion (V-7), and Ideological Commitment versus Confusion of Values (V-8). Whether the scale is comprehensive enough to give a reliable assessment of the resolution of the identity crisis can only be determined by more sophisticated validation techniques.

The construct validity of the Ego Identity Scale was given some support by Rasmussen's general research findings (1961, 1964). He found that the EIS scores of his subjects (naval recruits) were significantly related to two other measures: a peer nomination measure of psychosocial effectiveness, and an Adjective Check List measure of self-acceptance. Subjects (group C) who were discharged from the recruitment programme on clinical grounds (because they manifested clear-cut character disorders) were found to have significantly lower EIS scores than a group (A) who were rated as psychosocially effective. The EIS scores of group (B) were rated as minimally effective (psychosocially) but not discharged from the navy. These findings do provide some evidence of convergent validity for the Ego Identity Scale.

The data collected by Rasmussen also suggested a positive relationship between EIS scores and age (the ages ranged from 17 to 24 years) although this was not analysed statistically. This indicated that the scale might be useful in a developmental study. However it was designed for use with late adolescent males and therefore it was possible that it might not be suitable for use with younger subjects or with girls. It was therefore necessary to check this in a pre-test.

Pre-test of the EIS: The items were carefully scrutinized in order to ensure that they would be suitable for the present study. The items did not appear to be unsuitable for females or for younger subjects (although some had to be phrased in the present tense instead of the past tense). The wordings of some items considered clumsy was changed in order to make them more direct and simple, and a few items had to be altered because their content was not relevant to the experience of South African school pupils. However, an effort was made not to change the essential meaning of any item. The items are listed in Appendix B-1 (b) and where changes have been made the original wording is contained in brackets.

The order of the items in the scale was not changed and it was presented in the same form as the original scale with a separate answer sheet. The format of the latter was slightly altered and the instructions had to be changed to explain the method of response required. The subjects were still required to express general agreement or disagreement for each item.

The time taken to complete the scale ranged from 15 to 25 minutes. The subjects had no difficulty in understanding the format and only two items required explanation for a few of the subjects: items a and b of derivative 7. (Background).

Analysis: The main object of the analysis of the pre-test results was to determine whether the items discriminated adequately in the right direction for younger subjects as well as older subjects and for girls as well as boys. It will be recalled that no adequate analysis of item discrimination or of internal consistency was conducted by Rasmussen. Firstly, the sub-scale scores were analysed to check whether the sub-scales discriminated in the same direction as the total scale which would also give a measure of internal consistency.

Using the simple method described by Anastasi (1968, p. 117 and pp. 169 - 174) the total sample ($N=54$) was divided into three groups on the basis of total EIS scores: Upper (the 18 highest scorers), Middle, and Lower (the 18 lowest scorers). The frequency distributions of each set of sub-scale scores for each of the above groups was plotted separately. In order to obtain a Discrimination Index for each sub-scale, the proportion of "passes" in the Lower group was subtracted from the proportion of "passes" in the Upper group.

As the scores on any sub-scale could range from 0 through 12, a decision had to be made as to what score would constitute a "pass". As no theoretical or absolute criterion could be employed, the score which came closest to the median score for the total sample (each sub-scale separately) was considered the 'passing' score. Thus

approximately half the subjects would 'pass' obtaining scores equal to or higher than the 'passing' score, and this would also ensure the greatest possible discrimination. A Difficulty Level of .50 (i.e., 50% pass) yields the greatest amount of differential information and therefore the greatest possible discrimination. The Discrimination Index is biased towards medium Difficulty Levels and therefore it is necessary to consider both the Discrimination Index and the Difficulty Level in assessing the results of this analysis.

On this basis, scores of 8 or 9 through 12 were considered "passes" on all the sub-scales except the second where the median was less than 7. Few of the subjects obtained scores of less than 4 on any of the sub-scales. The Discrimination (D) Indices were also computed for males and females, and for Std. 10s (older group) and Std. 6s (younger group).

Exactly the same procedure was followed for each cluster of 4 items which reflect each of the 18 derivatives used by Rasmussen to define the content of the scale. This was done to check whether each derivative discriminated in the same direction as the total scale for the total sample as well as for both sex groups and both age groups. This was necessary to determine the usefulness of some of the derivatives (i.e., clusters of items). The scores on each item cluster could range from 0 through 4 and it should be noted that some clusters were more 'difficult' to pass (lower median score) than others: 2 (Interpersonal Trust), 4 (Self-certainty) and 5 (Independence).

The results of this analysis (presented in Appendix B-1 (c), Table 1) showed that only Sub-scale I and its clusters discriminated significantly for the whole sample and for both age and sex groups.

Sub-scales IV and VI also discriminated satisfactorily for all groups except for one cluster of items in each sub-scale: 11 (Competition) and 16 (Intimacy). The findings as regard Sub-scale VI tend to support the contention that the items in this sub-scale are primarily concerned with identity issues rather than with Intimacy versus Isolation (except perhaps cluster 16). It was decided that scores on clusters 17 (Judicious Repudiation) and 18 (Emotional Isolation) could therefore be included in a total 'ego identity' score while cluster 16 items should be omitted.

The sub-scales which presented inconsistencies, although they discriminated significantly for the total sample, were II, III and V. In Sub-scale II, cluster 5 (Independence) discriminated negatively for all groups and was therefore considered unsuitable. This probably contributed to the poor discrimination of the sub-scale as a whole, although cluster 4 (Self-certainty) did not discriminate very well.

Sub-scale III D Indices were not satisfactory on the whole, particularly cluster 7 (Background). Cluster 8 (Role Experimentation) discriminated very well for the Std. 10s but negatively for the Std. 6s (however, 88% of this group 'passed' this cluster of items). Cluster 8 ('Tireless initiative') discriminated positively for all groups but failed to reach significance.

Sub-scale V presented the greatest inconsistencies. On the whole it was 'easy' to pass (median greater than 9.0) although it had the greatest range of scores. The item clusters discriminated positively for all groups although cluster 13 (Well-being) failed to reach significance (77% of the sample obtained scores of 3 or 4 for this cluster).

The sub-scale scores for the females discriminated better than the scores for the males except on Sub-scale V. A similar pattern emerged among the D Indices for the two age groups: the scores of the older group (Std. 10) discriminated better (as expected) than the scores for the younger group (Std. 6) except on Sub-scale V (which discriminated very well for the 6s).

It was apparent from this analysis that the Ego Identity Scale is not a very satisfactory instrument although all the sub-scale scores and most of the item clusters discriminated in the expected direction for the total sample and for both age and sex groups. The pre-test data also suggested that the EIS might not be suitable for early adolescent subjects. 48% of the Std. 6 subjects obtained scores above 50 (ranged from 51 to 57) while only 31% of the Std. 10 subjects obtained similar results (ranged from 51 to 60). Most of these high scoring Std. 6s were classified as Foreclosed or Pre-moratorium. A possible explanation of these high scores among the younger subjects is that they have not yet experienced the problems which the EIS taps.

It was decided that the Ego Identity Scale should be used in this study but with all its limitations firmly in mind. It was felt that

there would be sufficient other data available to make reasonably accurate Identity classifications, and the Ego Identity Scale seemed to be the best available measure of Erikson's concept of identity. However, the item clusters which failed to discriminate in the pre-test were revised in order to eliminate some of the more obvious shortcomings of the instrument.

Revision of the EIS items: The items in the four clusters (5,7,11 and 16) which failed to discriminate were analysed separately (see Appendix B-1 (c), Table 2) and an examination of these items suggested that most of them were either ambiguous or they failed to reflect their derivative accurately. All the items in cluster 5 (Independence) discriminated negatively and so they were rejected completely. 16 new items were prepared to reflect this derivative and 8 new items for each of derivatives 7 (Background) and 11 (Competition). It was decided not to revise cluster 16 (Intimacy) but simply to exclude it from the final score (the score on this cluster was recorded separately).

The new items were submitted to an independent judge who selected the best 8 items for derivative 5 and four items each for the other two derivatives. These new items were inserted into the original scale in a random order so that the new version of the EIS contained 84 items. * This scale was administered to 185 high school subjects (boys and girls in Stds. 6, 8 and 10). The 15 clusters of items which were not under revision were scored a maximum score of 60).

* This scale contained 68 of the original 72 items (only cluster 5 items being excluded) and 16 new items.

The 30 highest scorers' records and the 30 lowest scorers' records (with equal proportions of boys and girls and of each age group) were used for an item-analysis of the three clusters of items under revision. The results of this analysis are contained in Appendix B-1 (c), Table 3. Each cluster consisted of 8 items and it had been decided that the four items in each which discriminated best (and significantly as well) would be included in the final scale.*

Again the items designed to reflect derivatives 5 (Independence) did not discriminate very well. Only two discriminated significantly in the right direction and were included in the final Ego Identity Scale. Four items discriminated negatively. This derivative reflects a very important aspect of identity, namely, the development of independence from the family. The general failure of these items to discriminate in the expected direction is interesting and may be related to the independence problem which was discussed in Part I. Each subject's score on these eight items was recorded separately and these results will be discussed in greater detail later.

In cluster 7 (background) two of the old and three of the new items discriminated significantly (four were included in the final scale).

* The subjects used for testing these items were those who participated in the main study. The investigator is aware that this procedure does not meet the required standards in test construction. Unfortunately, it was not possible for various practical reasons to pre-test the EIS again, and as only a small part of the scale was under revision it was felt that this compromise was justified. An effort was made to avoid possible contamination of the results by selecting the Upper and Lower criterion groups on the basis of scores obtained on the 15 clusters which were not under revision. It should also be noted that only a third of the subjects were used for the item-analysis while any evidence for the validity of the EIS obtained in this study will be based on the results for the total sample.

In cluster 11 (Competition) two old and two new items were found to discriminate significantly and these were included in the final scale. Thus the modified Ego Identity Scale consists of 66 items (presented in Appendix B-1 (a)). Sub-scale II consists of only 10 items (instead of 12) and sub-scale VI of only 8 items. All the subjects' Ego Identity Scale responses were rescored according to the modified version for the final data analysis.

(2) Peer Nomination Form (PNF):

The peer nomination technique was used to obtain an external measure of some variable(s) which should, theoretically, be closely related to ego identity. As no suitable instrument was available an 'omnibus' measure reflecting a number of traits which should correlate with ego identity was prepared. The results of the pre-test were extensively analysed (inter-item correlations) and the items were re-arranged into two main sub-scales.

Description: The final version of the Peer Nomination Form consists of 19 items arranged in pairs reflecting the positive and negative ends of continuous traits. The pairs of items are presented in a random order. The subjects were required to nominate not more than five of their classmates for each item, and it was completed anonymously. This Peer Nomination Form is presented in Appendix B-2 (a).

Sub-scale I (Identity) consists of four positive items: 1 (Social Respect), 5 (Identity), 7 (Calm) and 13 (Competent); and of five

negative items: 2 (Social Contempt), 4 (Unhappy), 6 (Identity confusion), 8 (Anxious) and 12 (Hostility).

Scoring: For each subject the number of nominations received for the four positive items was summed and converted into a percentage of the maximum number of nominations he might have received:

$$\frac{\text{N. nominations received}}{(\text{N. subjects in group} - 1) \times \text{N.items}} \times \frac{100}{1}$$

The same procedure was adopted to arrive at a 'score' for the five negative items. So as to avoid minus scores, the 'positive score' was added to 100 and the 'negative score' was subtracted from the sum obtained. Thus subjects who obtained no nominations on either the positive or the negative items would receive a final score of 100 (so would subjects whose 'positive score' equalled their 'negative score').

Sub-scale II (Social Acceptance) consists of three positive items:

3 (Happy), 9 (Popular) and 11 (Harmony); and one negative item:

10 (Isolated). A score for this sub-scale was obtained by the same procedure as described above.

The remaining two items (both negative) were treated separately as they do not fit into the above sub-scales but do give relevant data. These items are: 14 (Inadequate) and 15 (Withdrawn). The number of nominations received on each of these items was recorded as a percentage of the possible number of nominations which might have been received.

Sexual stereotypes are gauged by two pairs of items: 16 (Masculine) and 17 (Effeminate) apply to the boys; and 18 (Feminine) and 19 (Tom-boy) apply to the girls. The number of nominations received on each item were converted to percentage and algebraically summed (plus 100).

Development of the items: The items were selected on the basis of two main concepts: to assess 'interpersonal adjustment' and 'personal psychological adjustment' within the broad framework of Erikson's theory. The peer nomination forms designed by Tuddenham (1952), Wiggins & Winder (1961) and Duncan (1966) were carefully studied but further than that no systematic procedure was adopted. Items were selected which bear a fairly obvious relationship to the above concepts. In preparing the items the Wessman & Ricks 16 Personal Feeling Scales (1966) were found to be a useful source of item content. Seven pairs of items in the Peer Nominations Form reflect the same dimensions assessed by seven of these scales.

Items were prepared to reflect four dimensions of interpersonal behaviour (8 items), five dimensions related to 'personal psychological adjustment' (10 items) and the 'sexual stereotypes' (4 items). These items are presented in Appendix B-2 (b). A twenty-third item was included to obtain data for a sociogram to reveal the structure of the group. The items were then submitted to two qualified judges in order to check the content validity, the suitability and clarity of the wording of each item. Thus the pre-test form consisted of 23 items which were arranged in random order so as to avoid response set.

It was decided not to specify the number of nominations for each item (although a limit of 5 was set) as it was felt that this might create too much strain or result in inaccurate nominations being made. If the number of nominations to be made is left open then one might reasonably assume that only those individuals whose behaviour fits the description in each item (in the nominator's opinion of course) will be nominated. There appear to be several disadvantages in this procedure, but unfortunately little research has been done of the construction of peer nomination measures. It was finally decided to allow the respondents to complete the Peer Nomination Form anonymously as it was felt that they might be less reluctant to make nominations for negative items if they could not be identified.

Pre-test: The Peer Nomination Form was completed last of all. It caused quite a stir especially among the younger subjects. It was obviously a novel task and was met with a variety of reactions, usually amusement. A number of subjects, mostly girls, settled down to it without much comment and completed it conscientiously (some even made a list of the class' names to which they could refer). Many of the boys assumed an overt light-hearted or jocular manner (the other questionnaires had been completed quite seriously). However, the results did not contain any evidence of deliberate "fooling" and they were, in fact, very consistent. A few subjects were embarrassed and remained more-or-less inert. These were gently encouraged to proceed, and usually they required reassurance that their nominations would be completely confidential. Friends, especially among the girls, were eager to compare their nominations but this was discouraged. It was matter-of-factly suggested that

the subjects should 'cover' their forms and many of them did so. This was not insisted upon as the investigator did not wish to create a secretive atmosphere because this might have generated too much anxiety in some of the less confident subjects.

The pre-test subjects completed the Peer Nomination Form in 10 to 20 minutes, and the majority of the subjects seemed to have little difficulty in making the required nominations although quite a number protested about some of the items (e.g., "There's nobody like this one"). The protestations and overt jocularity were probably a mask or a device to reassure themselves and/or their friends that it was "not serious" while at the same time they could complete the nominations form quite accurately. Adolescents are particularly vulnerable to the opinions of their peers and this type of technique is likely to arouse some uneasiness. But there was no evidence to suggest that it should be abandoned for this reason.

Analysis of the pre-test data: The number of nominations which each subject received on each item was tallied. The two age groups were analysed separately to start with. The overall number of responses to each item was also tallied.

Response patterns (See Appendix B-2 (c), Table 1): No generalizations can be made from only two groups of subjects, but the response patterns suggested that girls tend to be considered more frequently than boys for nominations on items reflecting interpersonal harmony (3),*

* The item numbers given here in the discussion of the pre-test results refer to the margin numbers next to the items in Appendix B-2 (b).

sociability (5) and probably anxiety (12), while they were seldom considered for (9) Competence). This suggests a possible response set based on masculine and feminine stereotypes, while the fact that girls were more often nominated for 17 (Mature) (Std. 10s only) and boys more often for 18 (Immature) probably reflected true sex differences in these groups.

In general the girls received more nominations than the boys on most items. It was possible that the girls made more nominations than the boys did and if there was a tendency to nominate their own sex this might account for this. In the main study the subjects were required to state whether they were male or female so that these aspects of response could be investigated.

Considering the total number of responses made for each item two factors emerged from the pre-test results: firstly, fewer nominations were made for negative items than for positive items and this was more marked in the older group; and secondly, the number of nominations tended to correlate with the item position on the form when positive and negative items were considered separately. Thus items near the beginning tended to receive more nominations than items near the end of the form, but this was not considered serious enough to warrant attention.

The apparent reluctance to nominate peers on negative items is a problem which is difficult to circumvent unless the respondents are 'forced' to make a specified number of nominations on each item. The items which most frequently received no nomination at all were

22 (Tomboy), 14 (Unhappy), and 6 (Withdrawn) in both groups; while 10 (Inadequate), 2 (Social Contempt), 19 (Masculine) and 20 (Effeminate) received no nominations from about 30% of the Std. 10 group; and 18 (Mature) and 16 (Identity-confusion) received no nominations from about 30% of the Std. 6 group.

Inter-item correlations: In order to establish some sort of item validity and to find out what the Peer Nomination Form items measure, all the items were correlated with one another using the phi-correlation technique. Two or more nominations on an item were considered to constitute a 'pass'. This meant that the number of subjects who 'passed' each item ranged from 11% to 37%. As the phi-correlation technique is biased towards a medium difficulty level (50% pass) these low percentage passes resulted in low correlations (especially between positive and negative items). It is a problem which is difficult to solve because of the nature of the Peer Nomination Form: only those subjects whose behaviour is characteristic of the extremes of underlying continuous traits receive nominations (and therefore 'pass') while the majority of subjects whose behaviour is characteristic of the middle range are not nominated (and therefore 'fail'). The resulting correlation coefficients are distorted and this factor should be kept in mind.

If each pair of positive and negative items truly reflect opposite poles of a single dimension then there should be a significant negative correlation between the positive and negative item in each pair. The results of this are presented in Appendix B-2(c), Table 2. The correlation coefficients were low and three failed to reach

significance. More important than the magnitude of the correlation coefficients, however, is the number of subjects who 'pass' both the negative and the positive items. Theoretically, none should pass both, which occurs in three cases, but in the remaining cases not more than three subjects passed both items (usually only one). Therefore it was concluded that all the pairs do reflect opposite poles of each dimension.

One would also expect (1) all the positive items to correlate negatively with all the negative items, (2) all the positive items to correlate positively with each other, and (3) all the negative items to correlate positively with each other. Only those items which fulfilled these three conditions were retained in the Peer Nomination Form (See Appendix B-2 (c), Table 3). On this basis three items were eliminated: 5 (Sociable), 17 (Mature) and 18 (Immature).

The remaining items were then grouped into the sub-scales already described on the basis of the patterns of correlations which emerged and on logical grounds. Ideally a factor analytic procedure should have been used for this purpose but the data was not suitable. The resulting sub-scales therefore have no claim to validity on statistical grounds. The pre-test data suggests that the two sub-scales would correlate and one would expect this on theoretical grounds but they do appear to be tapping different aspects of behaviour. Items 6 (Withdrawn) and 10 (Inadequate) were retained because they provide useful additional data even though they do not fit into either of the sub-scales.

It should be emphasized that the final version of the Peer Nomination Form is an experimental instrument only. The results of the main study will give some evidence of its validity.

(3) Vocational Plans Questionnaire:

This questionnaire was designed for this study to provide data on each subject's 'vocational identity'. The questions were prepared so as to yield suitable information which would allow each subject to be classified according to the six identity categories defined earlier. As regards 'vocational identity' they were defined as follows:

- (1) Vocational-Identity-Achievement: Commitment to a realistic vocational choice which has been given due thought and consideration. A number of realistic alternatives have been considered and an independent choice has been made so that it is no longer regarded as a problem.
- (2) Vocational-Moratorium: Tentative commitment to a realistic vocational choice which is under consideration. Alternative choices may be offered and other vocations should have been considered in the past. The question of making a vocational choice is considered a matter of concern.
- (3) Vocational-Identity-Confusion: No commitment to a vocational choice which may be manifested by an unwillingness to even state alternative choices (i.e., he simply does not know what he wants to do). But the whole question of making a vocational choice is a source of anxiety and concern.
- (4) Foreclosed-Vocational-Identity: Commitment to a realistic vocational choice is manifested but there is no evidence that serious consideration has been given to the choice. Few or no alternatives have been considered, and the choice probably rests on his parents' or other significant person's wishes or advice. Making a vocational choice is not regarded as a matter for concern and never has been.

- (5) Vocational-Pre-moratorium: No realistic commitment to a vocational choice. He may offer no vocational preference, many alternative choices, or only one choice to which he is apparently committed. However, it is unrealistic and unconsidered, and the question of making a vocational choice does not arouse any concern.
- (6) Negative-Vocational-Identity: (This is almost impossible to predict or define but we may speculate). It would involve a vocational choice which is contrary to parental wishes and socially unacceptable (an extreme example would be professional crime or prostitution). It might also manifest itself in a refusal to make a vocational choice with apparent lack of concern.

Development of the questionnaire: The final version of the questionnaire is contained in Appendix B-3 (a). As it was the first one to be completed the first eight items simply require the subject to give general information such as age, sex, parent's occupation, school curriculum. The main body of the questionnaire consists of thirteen parts (items 9 through 13). Although no attempt was made to design a scale which would provide an overall score, the response to each item are limited where possible (multiple-choice). This makes it easier to compare the responses of the different subjects, and it also ensures that the necessary information is given. Some of the questions are open-ended but most of these only require very short answers. It was imperative that the questionnaire be kept as short as possible because of the time limitation.

The items were designed to yield information concerning four main factors which seemed to be relevant in the assessment of 'vocational identity':

- (1) Vocational choice: What type of work does he want to do (item 9), or what course of study does he wish to pursue at university (item 13)? Where a specific vocational choice is not given, the response to the latter item may give some indication of the subject's

'vocational identity'.

- (2) Degree of commitment to a vocational choice: Item 10(i) was designed to assess whether the respondent has made a definite decision or only a tentative one. No choice at all would be indicated in item 9.
- (3) Degree of realism shown in the vocational choice: Questions regarding ability (10-ii); financial aid available for any training which may be required (10-iii); realism as regards financial rewards (10-v) and length of training (10-iv); and personality factors (congruence with self-concept)(10-vi) were included to assess this aspect.
- (4) Amount of consideration given to the vocational choice: This aspect overlaps to a certain extent with 'realism' and the responses to the above items would also give some indication of the amount of consideration given. In addition the reasons for a particular choice (10-vii); the number and type of alternatives mentioned (9 and 11); and the responses to item 13 (university study plans) would be useful in assessing this aspect.

The number and type of alternatives mentioned would give an indication of 'realism', 'consideration' and 'commitment'. If the alternatives given in item 9 are all in the same field then at least the respondent has succeeded in narrowing down the field which would indicate a certain degree of commitment. On the other hand, vastly different alternatives may indicate some confusion and little commitment.

The question on reasons (10-vii) was designed in this way in order to distinguish vocational foreclosure on the expectation that these subjects would check any of the first three 'reasons' offered. This item was not included in the original scale which was pre-tested - neither were 10 (v) and (vi).

Pre-test: The pilot study subjects completed the questionnaire in 5 to 10 minutes and experienced little difficulty in understanding what was required. The main object of the pre-test was to determine whether the questionnaire would provide sufficient information about the subject's vocational plans for a reasonably reliable classification according to the 'vocational identity' categories. It was found that this was not the case. The classifications which provided the greatest difficulty involved deciding between Foreclosed-Vocational-Identity and Vocational-Pre-moratorium among younger subjects. Thus it was necessary to obtain more information on 'realism' (which distinguishes between these classifications). It was also found that the younger subjects often expressed commitment to a specific choice, and thus additional questions were required which would yield information about degree of 'consideration' given to this choice. Items 10 (v), (vi) and (vii) were added in an attempt to remedy these problems.

The pre-test was also necessary to provide data which could be used to formulate a more-or-less standard procedure for assessing the responses to this questionnaire and to establish more stringent criteria for classifying the responses.

Assessment of the responses: The definitions of the six 'vocational identity' categories were studied and a list of criteria was drawn up for each one. The responses of each subject were roughly classified according to these criteria. Then the responses to each item or group of items were compared in an attempt to determine similarities within classification groups and differences between groups.

Items in other questionnaires used in this study which reflect 'vocational identity' issues were also used in making the assessments and classifications. The items of Cluster 15 (Goals) of the Ego Identity Scale were considered relevant to the 'commitment' issue and subjects' scores on this cluster were recorded separately. Two items of the Problems Scale assess the degree to which vocational choices "worry" the individual: (3) "Choosing a career," and (9) "Choosing subjects in school, or a course to take at university". Item (3) was considered to carry more weight than item (9) which was only considered when appropriate (i.e., when the subject expressed the intention to go to university, or with younger subjects the choice of a school curriculum might be considered a 'vocational' problem). Responses to these items give some indication of the amount of concern attached to making a vocational choice.

Academic marks, I.Q. and school curriculum (item 8) were taken into consideration when assessing 'realism' of the subject's choice. This gave an objective measure of the subject's ability and also an indication of whether the subject would gain entrance to university.

Father's occupation (item 6) was occasionally relevant as it provided

some indication of the family's financial status. Comparison of the subject's vocational choice with the father's occupation could also be used to assess mobility aspirations. The subject's responses to the Values Questionnaire were sometimes useful in assessing whether his vocational choice was realistic or congruent with the 'values' he felt to be important.

In order to assess the relevant factors four-point scales were used to assess degree of 'commitment', 'realism', and amount of 'consideration'. These were finally expanded into seven-point scales because in-between ratings were often appropriate. The detailed schedule which was drawn up for the assessment of the Vocational Plans Questionnaire is presented in Appendix B-3 (b). Specific criteria for each 'vocational identity' classification on the basis of this schedule is contained in the Appendix B-3 (c). It must be emphasized that no rigid, objective scheme of assessment and classification can be used. The total configuration of the subject's responses has to be taken into consideration.

Limitations of the instrument: The main shortcoming of this questionnaire is that it does not give sufficient information for accurate and objective assessments to be made. Thus the final classifications are often more or less intuitive and open to subjective bias. It is doubtful whether any 'pencil-and-paper' instrument could be designed to yield adequate and valid information on the variables relevant to 'vocational identity' although a longer questionnaire would probably be more satisfactory (but this was precluded by the time factor). A loosely structured interview

technique would be appropriate but this was impractical. Nevertheless the Vocational Plans Questionnaire does suffice to give a rough index of 'vocational identity' but its limitations must be kept in mind.

(4) Problems Scale:

This scale was designed for this study to provide an index of the number and intensity of general adolescent problems reported by the respondent. It also provides data on different problem areas so that differences between the sexes and age groups can be analysed.

The scale consists of 15 items each describing a specific problem area. The subjects were required to check each item according to the following scheme:

- A. This has never really worried you.
- or B. This used to worry you but you have sorted it out now.
- or C. This worries you sometimes.
- or D. This worried you fairly often.
- or E. This worries you very much; it is a serious problem.

This format provided an index of the intensity of the problems which the subject experienced. The Problems Scale is presented in Appendix B-4(a).

Development of the items: An effort was made to cover all the major areas of behaviour in which adolescents experience problems. Thus traditional empirical research on adolescent problems was used as a starting point and not Erikson's theoretical writings although two

items were designed to gauge identity problems. Thus it was hoped that the instrument would be unbiased by theoretical expectations.

A survey of the relevant research was undertaken and four articles were considered particularly useful. Kaczkowski (1969) asked high school pupils (boys and girls, 9th through 12th grade) to rank 15 problem areas (isolated by P.M. Symonds in the 1930s) according to the degree of importance for the subject. Hartman (1968) studied the problems of college students between the ages of 18 and 20 years (79 males and 62 females) using the Mooney Problems Check-List, and Morgan (1969) has reviewed adolescent studies using the high-school form of the Mooney Problems Check-List. Adams (1964) used an open-ended technique with large samples (2051 boys and 1878 girls) ranging from 10 to 19 years of age. The subjects were asked to state the most serious present problem which they had, and the responses were classified according to 11 different categories. The findings of this study were in close agreement with the Symonds' and the Mooney Problems Check-List categories (See Appendix B-4 (b).) On the basis of these three sources nine major categories were considered important and sufficient to cover all the major adolescent problem areas. The items were prepared to reflect these problem areas.

The nine categories are as follows:

- (1) School: difficulties with academic work, studying, etc. (item 1); problems with teachers and discipline (item 8).
- (2) Interpersonal relations: problems in peer relations (item 2); problems concerning heterosexual relationships (item 12).

- (3) Family relations: parent-child relations (item 5);
problems involving siblings (item 10).
- (4) Vocational: choice of a career (item 3);
choice of a school or university curriculum (item 9).
- (5) Identity: feelings of confusion and lack of direction (item 7);
feelings of being misunderstood, criticized, or not
granted recognition by others (item 13).
- (6) Ethical: religious problems (item 11);
formulation of moral standards (item 15).
- (7) Physical appearance: (item 6).
- (8) Finances: (item 4).
- (9) Sport and recreation: (item 14).

Scoring: In order to obtain a score which would reflect both the number and the intensity of problems reported, the responses were weighted and added. Items checked in column A (never) received no point; each check in column B (sorted out) received 1 point; in column C (sometimes) 2 points; in column D (fairly often) 3 points; and in column E (very much) responses received 4 points each. Thus scores could range from 0 through 60. The total score, however, gives little indication of the distribution of the subject's responses (unless very high or very low) and says nothing about the nature of the problems experienced.

Pre-test: The subjects experienced little difficulty with the method of response required for this scale on the whole. A few asked for more explicit verbal instructions, but for the majority of the subjects the set of instructions on the questionnaire was adequate.

The responses to each item were analysed separately for the total sample and for both age and sex groups. All of the items were checked as problems although some were checked infrequently. All the items, except the first two, showed age and/or sex differences (see Appendix B-4 (c).) There was no evidence to suggest that any item was redundant and so the scale was not altered in any way. Total scores ranged from 0 through 43 but there were very few scores over 30 or below 10. The mean scores for each Identity Classification group differed in the expected directions.

The number of responses in each response category were also tallied: 47.4% of the responses were checked in column A (never) and 28.4% in column C (sometimes). This finding supports Bandura's thesis (1969) and others who challenge the 'storm and stress' view of adolescence. Otherwise the scale does not tap the important problems experienced by adolescents, but this seems unlikely.

Limitations: The scale is a crude instrument which only provides information concerning general adolescent problems. It can be easily 'faked': respondents may either check problems which they feel they should have, or they may be reluctant to admit problems (this one would expect from defensive subjects).

(5) Values Questionnaire:

This questionnaire was designed for this study to provide data on different value patterns which might be found among adolescents, and to determine the degree of importance attached to different interests and activities by various groups of subjects (based on age, sex, socio-economic status).

It consists of 12 items each describing different interests or activities which might be considered important by high school pupils. The subjects were required to rate each item according to the degree of importance they placed in it. Five response categories were provided for this purpose: Extremely important, Very, Fairly, Slightly, and Not important. They were then asked to rank the items from 1 through 12 according to degree of importance. The final questionnaire is presented in Appendix B-5 ^a(~~2~~).

Development of the items: This questionnaire is a modification of a similar questionnaire designed by Mogar (1964) to assess value orientations of college students. But he was interested in the degree of importance his subjects expected the various interests and activities to have in their lives after graduation. This study wished to assess existing value patterns in high school pupils. Therefore a number of Mogar's items were inappropriate and the language was too sophisticated on the whole. Where items had to be adapted or changed an attempt was made to use the same basic idea in preparing the new item. (Only two items retain no similarity with any of mogar's items. The items are compared in Appendix B-5(b)).

The form and presentation of the two questionnaires is almost identical.

Pre-test: Some of the subjects in the pre-test sample had difficulty understanding the ranking procedure but individual verbal explanations overcame this problem. The subjects expressed no difficulty in understanding the items.

Both the ranking and rating responses to each item were analysed separately for males and females in both age groups (See Appendix B-5 (c), Table 1). None of the items was rated 'Not important' by more than 22% of the total sample, although 'Politics' (item h) was ranked 12th by 57% of the sample. The percentage number of responses (total sample) in each rating category were according to expectation. The items were ranked according to importance for the male and female groups in each age group on the basis of their ranking and rating responses (separately) and the resulting pairs of ranks were almost identical indicating that the rankings and ratings give essentially the same information. Five of the items showed age differences (on the basis of overall ranks) and seven showed sex differences (Appendix B-5 (c), Table 2). It was concluded that none of the items were redundant, and that the questionnaire provided useful information concerning age and sex differences.

Value patterns were identified by comparing the ranking responses of the subjects (particularly the items ranked 1 through 4) and

grouping similar responses together. Five basic patterns were identified in this way (see Appendix B-5 (c), Table 3). Thus the Values Questionnaire also proved adequate for the identification of distinct value patterns among high school adolescents, and these patterns seemed to be related to the Identity Classifications although no detailed analysis was undertaken. (see Appendix B-5(c), Table 4).

Value Judgements Scale (VJS):

This short scale was designed to obtain data on adolescents' judgements of 'wrongness' of certain activities which are often regarded in a moral light. It was also thought that some relation might be found between subjects' judgements on this scale and the values which they found important. Its main purpose was to help identify delinquent or anti-social types (i.e., negative identities).

Description: The scale consists of only 6 items and, as it is so short, it is reproduced in full here. It was presented at the end of the main questionnaire.

How do you feel about the following? Please put a tick (✓) in the column which indicates how YOU feel about each one. Read all the column headings first.

	NOT Wrong.	SOMETIMES wrong.	WRONG for TEENAGERS.	WRONG for EVERYBODY.
a. Drinking.				
b. Smoking.				
c. Lying.				
d. Stealing.				
e. Gambling.				
f. Taking Drugs.				

Development of the items: This scale is a modification of an 8-item 'moral judgement' questionnaire devised by Wright & Cox (1969) and used with British high school pupils aged 16 to 18 years. The first five items above were taken from the Wright-Cox questionnaire (the other three were considered unsuitable). The response format is similar to that used by Wright & Cox.

Scoring: Although Wright & Cox (1969) did not attempt to obtain an overall score, they did find that the responses to the items were consistent. Therefore a scoring system seemed justified and an overall scores can be used more readily in a statistical analysis. A score was obtained by weighing the responses and summing them: no points for the responses in the first column ('not wrong'); 1 point for each response in the two middle columns; and 2 points for each response in the last column ('wrong for everybody'). Thus scores could range from 0 through 12, and a low score would indicate a more 'permissive' attitude towards these activities.

Pre-test: Mean scores for various groups of subjects were calculated, and an item-analysis was conducted (see Appendix B-6 (d)). The mean scores for the older subjects (Std. 10s) was slightly lower than that for the younger subjects (Std. 6s) but there were no sex differences (contrary to the findings of Wright & Cox, 1969). The Std. 6 scores were generally high and were not found to discriminate between the Identity Classifications nor between subjects endorsing different value patterns. But the Foreclosed Std. 10s obtained a slightly higher mean than the Std. 10s in the moratorium categories; and the Std. 10 Ss

with pattern I values (Religion-Family) obtained a higher VJS mean than Std. 10 Ss endorsing any of the other value patterns. (Wright & Cox (1969) also found that 'religiosity' was related to 'severity of moral judgement'.)

The item-analysis showed that the vast majority of the pre-test subjects considered Stealing, Taking Drugs and Lying to be 'wrong for everybody', but they were more 'permissive' towards Drinking, Smoking and Gambling.

Limitations: The VJS is of limited value because it yields a very narrow range of scores. Nevertheless the pre-test results were in the expected direction, and a larger, more representative sample may provide more interesting results.

(6) Janis-Field Feelings of Inadequacy Scale:

This scale was used in this study as a measure of self-esteem. It was designed by Janis & Field (in Hovland & Janis, 1959) as a sub-scale of a much longer personality questionnaire consisting of nine sub-scales for use with early adolescent subjects. The Feelings of Inadequacy sub-scale consists of 23 items reflecting anxiety in social situations, self-consciousness, and feelings of personal worthlessness according to the authors. One item from the third sub-scale designed to measure Test Anxiety (assumed to give a measure of lack of self-confidence) was added in this study. The wording of some of the items was changed slightly but the meaning of the items was not altered.

The response format was changed from a rating scale containing five response categories to one containing only four (the former required very fine discriminations). The instructions for the scale were prepared by the present investigator. The final version of this scale which was used in this study contained 22 items and it is presented in Appendix B-6 (a). Two items were dropped because they failed to discriminate for the pre-test sample.

Scoring: The scale was scored on the same principle that Janis and Field used. No points were allotted to responses in the last category (indicating no feelings of inadequacy); 1 point to responses in the third column; 2 points in the second column; and 3 points to each response in the first column. Items 2 and 4 were scored

in the opposite direction. Thus scores could range from 0 through 66 for the final scale. Low scores indicate high self-esteem (few feelings of inadequacy).

Development of the scale: The details are available in Hovland & Janis (1959). The original sub-scale has a split-half reliability coefficient of .83 and a Spearman-Brown reliability coefficient of .91. Some evidence for the validity of this sub-scale is provided by Hamilton (1969) who used it in a multitrait-multimethod correlation matrix.

Pre-test: As some changes had been made in the scale on item analysis was undertaken using the pre-test data to check that all the items discriminated in the right direction. The same method was employed as was described for the analysis of the Ego Identity Scale. The results of the item analysis are contained in Appendix B-6 (c).

Only two items failed to discriminate significantly for the total sample and therefore they were excluded from the final scale. These items are similar in content reflecting difficulties in making conversation (items (2) and (22) on the pre-test scale). The items have been divided into groups which have similar content (see Appendix B-6 (b)). Group I contains items which reflect concern or anxiety about the opinions of others concerning oneself or one's actions and concern about getting along with people. On the whole these items discriminate well throughout except the last two (2 and 9). These two reflect concern about the good opinion of others in the

future. Item 9 may be slightly inappropriate for the majority of females.

Group II contains items reflecting feelings of personal worthlessness. Only one item in this group showed satisfactory discrimination (item 15). On the whole the female scores discriminate significantly while the male scores do not. The main problem with these items is that more than half the sample responded in the same way, usually in the last category (almost never) and this was particularly the case with the male subjects. Thus the subjects either didn't feel worthless on the whole or they were unwilling to admit such feelings.

Group III contains items reflecting self-consciousness and shyness, and none of these items discriminated very well. Again, for most of the items in this group, the subjects tended to respond in the same way (usually in the second last category - 'slightly' or 'sometimes'). A general pattern was found to exist: where sub-group scores fail to discriminate significantly it is usually because more than half that group responded in the same category. For the Group I items there was a much better spread of responses on the whole.

The remaining item (8) which was designed to reflect test taking anxiety (the additional item) discriminated reasonably well. This analysis revealed a certain degree of imbalance in the Janis-Field Feelings of Inadequacy Scale which is not entirely satisfactory.

While group II items come closest to 'self-esteem' and are likely to elicit defensive responses, the remaining items seem to reflect what Erikson describes as the 'self-certainty versus self-consciousness' dimension of the identity crisis.

(7) F-Scale items: Authoritarian Submission and Conventionalism:

The items of the F-Scale which measure submission to authority and adherence to conventional middle-class values were administered in order to identify subjects with Foreclosed identities on the basis of Marcia's findings (1966, 1967).

The final version of this scale which was used in this study consists of 8 items drawn from the 'Authoritarian Submission' and 'Conventionalism' clusters of the California F-Scale (Adorno, Frenkel-Brunswick, Levinson & Sanford, 1950, Forms 45 and 40) and 2 items from the Forced-Choice form of the F-Scale designed by Strickland & Janicki (1965). Thus it consists of 10 items which the subjects were required to rate on a six-point scale ranging from 'Strongly Agree' to 'Strongly Disagree'. The final scale is presented in Appendix B-7 (a).

'Authoritarian Submission' as measured by the F-Scale is defined as a "submissive, uncritical attitude towards idealized moral authorities of the ingroup"; and 'Conventionalism' as "rigid adherence to conventional, middle class values" (Adorno, et al, 1950).

Selection of the items: Based on Marcia's findings the 10 items in the two clusters for Conventionalism and Authoritarian Submission of the California F-Scale (Forms 45 and 40) were considered (contained in Appendix B-7 (b)). However, item (23) was considered unsuitable and the wording of item (42) was changed slightly. The Forced-Choice form of the F-Scale (Strickland & Janicki, 1965) was also studied because of the considerable controversy concerning acquiescence bias

on the original F-Scale. But this scale was considered unsuitable for several reasons: (1) it was felt that the younger subjects might have difficulty with the response format; (2) it contains only a few of the original items which were administered by Marcia (1966, 1967) and found to be effective for the present purposes; (3) acquiescence response set may not simply be a method error but a meaningful personality component which one might expect to be characteristic of Foreclosed identities.

Three items from the Forced-Choice form were included in the pre-test scale to make it longer (12 items altogether). Only the description of the 'authoritarian' attitudes were used and the wording was changed slightly in two of them (see Appendix B-7 (b)).

Scoring: The response categories (the same as on the California F-Scale) and the point allocations were as follows:

Strongly Agree (6)	Slightly Disagree (2)
Moderately Agree (5)	Moderately Disagree (1)
Slightly Agree (4)	Strongly Disagree (0)

Thus scores could range from 0 through 60 with high scores indicating attitudes reflecting Authoritarian Submission and Conventionalism.

Pre-test: The scale was administered in the pilot study primarily to ascertain whether the younger subjects could cope with it. Some of them wondered whether "supernatural power" (item 4) might mean 'black magic' but it was decided not to change the wording of this item. Otherwise they expressed little difficulty with the questionnaire. The scores obtained by the pre-test sample were very high on the whole, ranging from 31 to 63 (total score could equal 72 for the

pre-test scale) with a mean score of 48.8. The Std. 6 mean (51.5) was considerably higher than the Std. 10 mean (46.8) and there were also sex differences (females obtained lower mean scores in both groups).

An item analysis was also undertaken to check whether all the items discriminated to the right direction. The results of this are presented in Appendix B-7(c), ~~Table 2~~. The frequency of responses in each response category is also given (~~Table 1~~). For all the items except the last two the 'Strongly Agree' category received more responses than any other single category. Item (^b~~5~~) was scored in the opposite direction and was found to discriminate negatively. This may be evidence of acquiescence response set but it is an extremely ambiguous item. Therefore it was excluded from the final scale.

All the other items discriminated very well except items 5, (^a~~5~~) and 10. The analysis of items 5 and 10 was distorted because of the age differences in 'difficulty' level. Item (^a~~5~~) was excluded because of the peculiar pattern of responses on this item: using 6 points as a 'pass' it has a suitable 'difficulty' level but the D Index (.39) only just reaches significance. Using 5-6 points as a 'pass' it fails to discriminate at all. It was also a new item and therefore may not have been appropriate. The other two new items (3 and 8) discriminated very well and their content is less ambiguous.

(8) The Rating Scales and Sociogram:

Five short self-rating scales were designed to provide data on variables which might be relevant to the development of a sense of identity. There was little evidence in previous research or in theory to suggest that these variables (with the exception of parent-child relations) might be critical factors in identity formation, and therefore, measures were designed which would require the minimum amount of time to complete but would still provide a rough index of the behaviour under consideration. It was also hoped that this additional information would be useful in classifying individual records according to the various identity categories. However, the scales are extremely crude, easy to 'fake', and should be taken at face value. The rating scales are presented in Appendix B-8 (a).

A. Elation-Depression:

This is a 6-point scale consisting of six statements reflecting the elation-depression continuum. The bottom of the scale (level 1) is defined by the statement: "Very sad. Feeling terrible, miserable, just awful." The top of the scale (level 6) is described by this statement: "Very happy and in very high spirits. Seem to be up in the clouds." The subjects were required to place a tick next to the one statement which best described the way they usually feel (most of the time), and a cross next to the statement which described the way they were feeling at the present time (now). A large discrepancy between the two ratings might be meaningful: severe

depression or extreme elation experienced at the time of testing might be reflected in other scores thus providing an inaccurate assessment of the subject's usual state (Wessman & Ricks, 1966). This scale was based on a similar 10-point scale designed by Wessman & Ricks (1966).

The pre-test data revealed that on the whole this sample of subjects felt happy usually and at the time of the test administration (it was the last day of the school term!). Relevant results are contained in Appendix B-8 (b) and these show that there is the expected relationship between these ratings and Ego Identity Scale scores although no statistics were computed. The ratings were also useful in making Identity Classifications.

B. Mood Variability:

This is a 5-point scale consisting of five statements ranging from almost complete stability of mood (level 1) to extreme mood variability (level 5): "One minute I am up in the clouds and the next minute I am down in the dumps." The subjects were required to mark the one statement which described their mood state best.

The pre-test data (Appendix B-8 (c)) revealed that 46% of the total sample checked level 2 and 26% level 3. Only one subject marked level 5. There were no marked age or sex differences. Inspection of the data suggested that there might be some relationship between the Ego Identity Scale scores and Mood variability ratings but no analysis was undertaken. The relationship between the Identity Classifications and Mood Variability ratings was clearer (especially for Std. 10s): Moratorium subjects tended to report greater variability

of mood than Foreclosed or Moratorium→Achievement subjects as would be expected. It was concluded that this scale was useful and should be retained.

C. Peer Relations:

This scale consists of five descriptive statements relating to peer relations. The bottom of the scale (1) is represented by the following statement: "I am a lone wolf. I don't really have any friends at all." The top (5) is: "I have lots of friends and get on well with most people. I seem to be pretty popular on the whole". This scale does not reflect an underlying continuum. The subjects were required to check the statement which they felt described them best. 60% of the Std. 6 subjects in the pilot study checked number 5 (many friends) while the majority of Std. 10s checked number 3 (few close friends) which supports other findings in this field. Relevant results are presented in Appendix B-8 (d). Inspection of the data suggested that responses to this scale would be meaningful in relation to identity formation and in relation to the external measures of popularity provided by the Peer Nomination Form and the Sociogram.

Sociogram:

The following item was included after the Peer Relations rating scale to provide data for a sociogram of each group which participated in the study: "Please name 1 or 2 people in this class whom you like best?" The sociogram would help to identify popular and isolated members of the group as well as cliques. It was hoped that it might throw some light on response patterns in the Peer Nomination

Form as there was evidence of 'halo effects' (positive and negative) while other members seemed to be completely overlooked. Clique members might nominate each other indiscriminately on positive items in the Peer Nomination Form as well. Unfortunately the usefulness of the Sociogram could not be checked in the pilot study because this item was placed at the end of the Peer Nomination Form in error (the P.N.F. was completed anonymously).

D. Parent-Child Communication:

This scale was designed as a rough index of parent-child relations, and consisted of five response categories reflecting a continuum. The statement at the bottom of the scale (level 1) reflects a complete lack of communication: "We just do not agree on anything, and I can't talk to him (or her) about anything important. We don't seem to have any of the same interests." The top of the scale (level 5) reflects good parent-child communication. The subjects were required to place a tick next to the statement which best described their relationship with their fathers, and a cross for their relationship with their mothers.

A crude analysis of the pre-test data is contained in Appendix B-8 (e). The results were in accordance with expectations. On the whole the subjects reported better communication with the same sex parent (some Std. 10 males reported better communication with their mothers) and the Moratorium subjects more often reported poor communication with one parent or both than Foreclosed or Moratorium-Achievement subjects.

E. Conduct:

This scale consists of three items which the subjects were required to rate on a 5-point scale with the following categories: Good, Usually good, Sometimes good, Seldom good, Rebel. The items are:

- a. Describe your behaviour in school.
- b. What do you think your teachers think about your behaviour?
- c. Describe your behaviour at home.

The pre-test data (see Appendix B-8 (f)) suggested that some meaningful relations between conduct ratings and Identity Classifications might be found in a larger sample of subjects.

Throughout the data obtained in the pilot study the younger group of subjects tended to rate themselves as 'better' than the Std. 10 subjects did and they also tended to obtain higher scores on the self-report measures. This was particularly the case for the Std. 6 Foreclosed group. Thus there were no marked inconsistencies in the data as a whole.

(9). Other measures and sources of data:

In the main study the teachers were asked to provide data on several aspects of the subject's behaviour and development.

Teacher Rating Scale for Conduct:

Each class teacher of the groups which participated in the study was given a list of the group's names and asked to rate each subject's conduct according to a five-point scale: Very good, Good, Fair, Poor, Very Poor. They were also asked to note specific types of misdemeanours such as truancy and stealing where appropriate.

Teacher Rating Scale for Physical Development:

In order to obtain a rough index of physical maturation for each subject, the physical education teachers were given lists of the subject's names and asked to rate each subject's physical development according to a five-point scale: (5) Very good, physically mature; (4) Good; (3) Fair; (2) Poor; (1) Very poor, physically immature.

Home Background:

Teachers and the school secretary were asked to provide information on deaths and divorces in the subject's families. This, however, was not undertaken systematically and therefore no reliable information was obtained.

Academic Performance and I.Q.:

For each subject the aggregate mark (percentage) obtained in the mid-year examinations of that year was obtained from the school

records. His position in his class was also noted. On entering high school routine I.Q. tests (New South African Group Intelligence Test) are administered, and so the subject's I.Q.s were obtained from the school records. Unfortunately these were not available for all the subjects who participated in the main study, and the results of this intelligence measure should be regarded cautiously.

Socioeconomic status: Each subject was asked to give the occupation of both his parents (items 6 and 7 on the Vocational Plans Questionnaire) so as to provide a rough index of socioeconomic status. Only the father's occupation was used and the seven-point rating scale designed by Warner, Meeker & Eells (1960, Table 7, p. 140-141) was used as a guideline in making classifications. Examples of the seven categories are as follows:

1. Professionals; big businessmen; gentleman farmers.
2. Semi-professionals (e.g. high school teachers); business managers (large concerns); accountants, estate agents.
3. Social workers, primary school teachers; minor business officials; bank clerks, private secretaries; building contractors.
4. Small businesses; clerical; factory foremen, artisans with their own concerns; police inspectors.
5. Telephone operators; artisans (apprentice or medium-skilled); policemen, firemen, bartenders.
6. Semi-skilled workers; night watchmen, waitresses, truck drivers.
7. Heavy labour (unskilled); janitors, chars.

The fathers' occupations of this sample ranged from 2 through 5 with one or two in the first category and in the sixth category. Many had clerical jobs or were salesmen and these were difficult to classify (3 or 4). So three major classifications were used:

- I. Upper-middle: professional and semi-professional; managerial positions; clerks and salesmen with responsible positions (includes categories 1, 2 and some in 3 of the Warner et al scale).
- II. Middle: general clerical and salesmen (includes some in category 3 and some in category 4 of the above scale).
- III. Lower-middle: artisans, policemen, bus conductors, (includes some in category 4 and categories 5, 6 and 7 of the above scale).

6. General Procedure.

The Principal of the school which participated in this study provided information on the composition of the classes in the relevant standards and eight classes were selected on the basis of the criteria laid down in section 2. The investigator spent approximately one week at the school and administered the questionnaires to the relevant class groups in the normal classroom setting during non-academic school periods (so there was no interference in the normal school routine). Two periods (40 minutes each) were allowed for each class.

All the short questionnaires were duplicated and stapled together with a general introduction stating the general purpose of the questionnaires and basic instructions on the front. This introduction was entitled "What is this all about?" and was designed to elicit maximum co-operation from the pupils (presented in Appendix A-3). These questionnaires were presented in the order discussed in the previous section:

- Vocational Plans Questionnaire.
- Problems Scale.
- Values Questionnaire.
- Janis-Field Feelings of Inadequacy Scale.
- F-Scale items.
- Rating Scales.
- Value Judgements Scale.

These questionnaires were administered during the first period with each class. The investigator was totally unknown to all of the subjects and was not introduced by any of the school staff (and no member of staff was present during the testing periods). A copy

of the questionnaires was handed to each pupil. The investigator introduced herself and read the front page introduction aloud, answered any questions and then instructed the pupils to proceed.

Instructions for each scale were included in the questionnaires. Some individuals asked for explanations of the instructions for some of the scales but on the whole the instructions were adequate. Those subjects who did ask for explanations were usually seeking re-assurance. The investigator wandered around the classroom so that she could check that the questionnaires were being filled in correctly, answer questions, and encourage slow workers to work more quickly. Talking was discouraged but absolute silence was not enforced.

During the second period with each class the Ego Identity Scale was administered first and the Peer Nomination Form second. The same procedure was adopted with the Peer Nomination Form as in the pilot study and the reactions to it were generally the same. For most of the classes there were a few days between the first testing period and the second. During this time the first series of questionnaires were checked to ensure that they had been completed correctly, and subjects were asked to correct mistakes or complete these questionnaires during the second session.

Two classes were unable to complete all the questionnaires during the two periods allotted and the school allowed them extra time. Therefore all the questionnaires were finished by all the subjects who participated. Because two separate periods were involved there was some attrition of subjects who missed one of the sessions through absence.

The co-operation of the pupils was very good on the whole even among the more 'rebellious' classes. They seemed to find the questionnaires interesting and only the Peer Nomination Form aroused some anxiety in a few subjects. They were asked to put their names on each questionnaire (except the Peer Nomination Form) and this did not arouse any protest. They were assured that their responses would be confidential, and each subject is identified by a number in this report.

The co-operation of the teachers was also good on the whole, and many of them displayed a keen interest in this research. Thus it was possible to obtain additional information about the pupils in most of the classes which participated through informal discussions with their teachers. The class teachers of each participating class (except one) also completed the Peer Nomination Form for the class and the Conduct Rating Scale. The Physical Education instructors completed the Physical Maturation Rating Scale for all the subjects.

All the questionnaires were subsequently scored and the data was recorded on a separate sheet (profile) for each subject (see Appendix C-1). The details regarding the procedure used for the Identity Classifications and the statistical analysis of the data will be discussed in Part III.

7. Description of the Sample.

The criteria for sample selection were discussed in section 2. Briefly they are as follows: (1) a White, English-medium, predominantly Gentile, co-educational high school representative of the urban socio-economic range found in this particular cultural group in South Africa; (2) school class groups from Standard 6, 8 and 10 to be used as the basic sampling units so that there would be approximately equal numbers from each school standard; (3) the majority of the subjects in the classes selected from Std. 6 and 8 should be academically capable of reaching matriculation (Std. 10).

The school which finally agreed to co-operate in this study fulfilled the above criteria reasonably satisfactorily but various practical difficulties beyond the control of the investigator made the composition of the final sample unsatisfactory in certain respects. These limitations must be taken into account in the analysis of the results.

The school from which the sample is drawn is a White, English-medium, co-educational high school. There are no subjects from Jewish homes but some 10% of the final sample have Afrikaans names and there are also a minority of other culturally marginal subjects such as immigrants. The school is situated on the edge of a lower-middle suburb adjacent to an upper-middle class suburb, and has a predominantly lower-middle class population. In this respect it fails to fulfill one of the original criteria.

Socio-economic background of the sample: Using father's occupation as a crude measure of socio-economic status the subjects were classified

according to the modified version of the Warner et al scale (1960) for rating occupation. As can be seen from Table 2.2 the final sample represents the full range of middle class occupations with very few subjects having fathers of professional status (1) or lower class status (6 or 7). The occupations classified as Class I are mainly in the business and commercial fields, Class II are mainly clerical and shop salesmen, and Class III are mainly artisans.

TABLE 2.2: Number of Subjects in each Socio-economic Classification.

	I.			II.	III.			
	1	2	3	3/4	4	5	6	7
Male Ss.	3 + 18 + 18 40%			28 30%	16 + 11 + 1 + 0 30%			
Female Ss.	1 + 10 + 6 28%			15 25%	11 + 17 + 1 + 0 47%			
TOTAL.	4 + 28 + 24 36%			43 27%	27 + 28 + 2 + 0 37%			

Thus the final sample is more representative of the middle class than one might have expected from a predominantly lower-middle class school. This is probably due to the selection criteria based on academic performance. Nevertheless, it does not fully represent the socio-economic range found in the South African urban English-speaking community because of the absence of subjects from the upper-class. Although the distribution for the total sample is well-balanced, there is quite a large sex difference in the distribution which is difficult to explain. The distribution within each standard (Appendix C-2, Table 1) is even more irregular.

Sample composition in terms of age and sex: In the school selected there is a large percentage of pupils who do not complete high school. At the time of testing there were some 180 pupils (6 classes) in Std. 6, about 116 pupils (4 classes) in Std. 8, and 63 pupils (3 classes) in Std. 10. All the available Std. 10 pupils were selected because approximately 60 subjects in each age group was considered necessary. The Std. 6 pupils were placed in different classes more-or-less on the basis of academic performance (in primary school) and so the two top classes (70 pupils altogether) were selected for the study.

The Std. 8 age group provided problems as the composition of the classes was based on school curricula and one class contained only girls. Only the A class as a whole fulfilled the selection criteria. The class containing only girls was excluded, and the remaining two classes (as well as the A class) were tested (a possible 86 pupils altogether). The records of Std. 8 pupils fulfilling at least two of the following criteria were excluded from the final analysis:

(1) stated intention not to matriculate; (2) academic average below 40%; and (3) over $16\frac{1}{2}$ years of age at the time of testing. The final Std. 8 sample is not ideal even after the elimination of some of the subjects. There still remain a number of subjects who probably would not reach Std. 10 (low academic performance) but as they had no plans for leaving school immediately they probably did not feel the need to make any commitments (re vocational choice) and therefore might be regarded as still in the moratorium stage.

TABLE 2.3: Age Distribution in each School Standard.

Years.	Std. 6.	Std. 8.	Std. 10.	TOTAL.
12	2			2
13	45			45
14	8	1		9
15	1	32		33
16		16	4	20
17		1	31	32
18			11	11
19			4	4
TOTAL.	56	50	50	156

The ages range from 12 yrs, 10 mths, to 19 yrs, 7 mths, but the distribution is not even because of the sampling procedure. The overall mean is 15.7 years (S.S. = 1.8). In each school standard the age range, mean and standard deviation are as follows:

	<u>Range.</u>	<u>Mean.</u>	<u>S.D.</u>
Std. 6:	12 yrs, 10 mths. - 15 yrs, 1 mth.	13.7 yrs.	.44
Std. 8:	14 yrs, 9 mths. - 17 yrs, 2 mths.	15.9 yrs.	.51
Std. 10:	16 yrs, 7 mths. - 19 yrs, 7 mths.	17.8 yrs.	.67

The mean ages of the boys and girls do not differ but there is much greater variation among the Std. 10 boys' ages (S.D. = .75) than among the Std. 10 girls' ages (S.D. = .33) (Appendix C-2, Table 2). The four nineteen-year-olds are all boys and there are only four eighteen-year-old girls (the oldest is 18 years, 4 months).

The actual numbers of subjects in each standard are lower than the numbers that were potentially available in the classes selected. This

attrition was due to absences for one or both of the testing sessions: selection was made for the Std. 8 group only according to the criteria outlined above.

There are more males than females in each group (school standard) but the numbers are proportional:

	<u>Std. 6.</u>	<u>Std. 8.</u>	<u>Std. 10.</u>	<u>TOTAL.</u>
Males:	34	28	33	95
Females:	22	22	17	61

Academic Performance and I.Q.: The average mark (converted to a percentage) obtained in the mid-year examinations was used as an index of academic performance. The distribution of subjects according to Academic Averages in each school standard is given in Appendix C-2, Table 3. This shows that there are proportionately more Std. 8s who obtain low Academic Averages than in Std. 6 or Std. 10 (taking into consideration the expected decrease with school standard). The range, mean and standard deviation for each school standard is as follows:

	<u>Range.</u>	<u>Mean.</u>	<u>S.D.</u>
Std. 6:	34% - 82%	55.7%	10.8
Std. 8:	28% - 73%	47.8%	10.4
Std. 10:	32% - 77%	48.1%	10.6

Table 4 in Appendix C-2 shows that the girls tend to do slightly better academically than the boys but the difference is greatest for the Std. 8 group: Std. 8 female mean = 50.8% and the Std. 8 male mean = 45.4%.

The I.Q.s (New South African Group Intelligence Test) were obtained from the school records for most of the subjects. Table 5 in Appendix C-2 gives the distribution of I.Q.s in each school standard. The mean I.Q. for the total sample is 110.8, and the I.Q. range and mean for each school standard is as follows:

	<u>Range:</u>	<u>Mean:</u>
Std. 6:	97 - 145	113.2
Std. 8:	82 - 130	107.9
Std. 10:	94 - 132	111.0

The picture obtained from the I.Q. distribution and means (Appendix C-2, Table 6) is similar to that obtained from the Academic Averages with the Std. 8 sample (especially the boys) obtaining lower mean I.Q.s than the Std. 6s and 10s, and the girls (except in Std. 6) obtaining slightly higher mean I.Q.s than the boys.

Summary: The sample meets the selection criteria except on two counts: firstly, it does not represent the full socio-economic range found in the South African English-speaking urban community, but it does represent the full range of middle-class occupations although the greatest proportion of boys come from upper-middle class homes and the greatest proportion of girls come from lower-middle class homes; and secondly, some of the Std. 8 group (mainly boys) do not meet the academic ability criterion and so this group is not altogether comparable with the Std. 6 and 10 groups in terms of academic performance and I.Q.

The age distribution is satisfactory but the upper limit is slightly lower for the girls (18 yrs. 4 mths.) than for the boys (19 yrs. 7 mths.).

There are roughly equal numbers in each of the three school standards, and there are more boys than girls in the sample but the numbers are proportionate (approximately 3:2). As would be expected from the academic ability criterion, the sample only represents the upper range of academic achievement and intelligence with an overall mean I.Q. of 110.8 and 85% of the sample obtain I.Q.s above 100.

PART III:

RESULTS

1. Identity Classifications.

Before presenting the results of the statistical analysis of the data it is necessary to describe in detail how the subjects were classified according to the six types and stages of identity formation which were defined on the basis of the Erikson's writings and other research (p. 102). It must be repeated that this aspect of the study is exploratory and that although criteria for each classification were laid down in terms of scores on specific scales and responses patterns to questionnaires (Table 2.1, p. 119) no systematic, objective method of classification could be used. The two main factors responsible for this will be mentioned briefly (see pp. ¹²⁰⁻¹²² for a more detailed discussion):

Firstly, the criteria are largely hypothetical because of the lack of relevant research. The only criteria which rest on fairly firm ground, either in Erikson's writings or on previous research, are those for the 'Identity-Achievement' and 'Identity-Confusion' categories, and the high F-Scale scores for the 'Foreclosed' classification. The criteria for the 'Pre-Moratorium' and 'Negative-Identity' classifications are particularly doubtful.

Secondly, most of the measuring instruments employed in this study are still in the development stage and therefore have no proven validity. They are also easy to fake. This created problems in the interpretation of individual scores and odd scores had to be seen in the light of the other data available. For instance, it soon became clear from the raw data that subjects who obtained high PNF I scores usually obtained among the highest marks in their class which suggested that

PNF I scores might be more closely related to academic achievement than to identity development.

Thus, in the pilot study the criteria were used as a guide only, and the classifications were made on the basis of each subject's total configuration of scores and responses on all the measures used although the most weight was given to scores on the criterion measures. This allowed for a more or less subjective appraisal of each subject's psychological functioning in terms of Erikson's theory. Although the scores of the pre-test subjects in a given classification did fit the criteria for that classification by and large (which suggests that the criteria are relevant and useful), the pilot study data raised some questions about the meaning of EIS scores and high F-Scale scores of young adolescents. It was also found that the scores of very few subjects fitted all the criteria for the category in which they were classified. This suggested that it would be unwise to use the criteria as the sole basis of classification and the pilot study was too small to clarify the aforementioned issues concerning the validity of the criteria and the validity of the measuring instruments used.

It was therefore decided that the classification procedure should also involve the appraisal of each subject's total configuration of scores and responses in terms of Erikson's theory. The object of this was to obtain a more or less intuitive understanding of the psychological functioning of each individual. Therefore it involved subjective judgements based on inference and interpretation of scores within the context of all the data available for the particular individual (in contrast to using a standard interpretation of test scores) and no

systematic method of assessment could be used. The accuracy of classifications based on this type of assessment would to a certain extent depend upon the judge's familiarity with Erikson's work and upon his knowledge of the measuring instruments being used. Nevertheless these assessments were not easy to make because, although the data covers quite a wide range of variables, the actual information available on each subject is rather superficial. In order to make really accurate identity classifications it is necessary to assess such factors as the degree and quality of ego integration, the degree of autonomy which has been established and the degree of rigidity and defensiveness in character structure but it was found that the available data does not really permit such inferences to be made. The method is, of course, open to subjective bias and this is its most serious limitation.

In practice, appraisal of a subject's total configuration of scores only proved useful in those cases with borderline scores on the criterion measures but individual scores often made more sense when seen in the light of scores on other measures. Responses to individual items of the Problems Scale, Values Questionnaire and Peer Nomination Form were often very useful. A defensive response set was inferred when a subject obtained very 'good' scores on the self-report measures and low scores on the PNF, but each individual case had to be judged on its own merits.

The actual steps involved in the classification procedure are outlined in the following section. This is followed by a discussion of some individual records to illustrate the method of classification.

and some specific problems which were encountered. A few interesting individual findings are mentioned as these tend to be lost in an analysis based on group differences. Cases which failed to fit into any of the categories are also discussed, and this relates to a more general issue which should be discussed immediately.

Theoretically, the six identity categories which have been defined are mutually exclusive and should cover all types of psychological functioning during the adolescent period. Therefore, firstly, no subject would be expected to fit more than one classification, and secondly, one would not expect any subjects not to fit into any of the classifications.

In practice, subjects who obtained borderline scores (especially on a critical variable such as the F-Scale items) were often difficult to classify because it was not always possible to make valid inferences about ego integration. But it was decided that each subject should be classified according to only one identity category (for theoretical and statistical reasons). This means that some subjects may be misclassified even though the difficult cases were submitted to a second, independent judge to classify.

The second point raised above reflects an assumption that the identity categories which have been defined are exhaustive. Although no systematic attempt was made to challenge this assumption (this would have required a more rigid and objective system of classification) and as a general rule subjects were classified according to the category which their scores fitted best, the data was scrutinized in an attempt to find different patterns of scores. One distinctly different pattern

was found for seven subjects who have been labelled '? Foreclosed' in the Data sheets (Appendix C-4, Table 7). But as this group is so small it could not be treated separately in the major statistical analysis and these subjects were classified as Moratorium or Moratorium→Confusion for statistical purposes. In some of the analyses they have been treated as a separate group. Apart from these seven subjects very few cases were found which were unclassifiable in the sense that their scores failed to fit any of the identity categories.

In addition to the six categories which have been defined two other classifications were also used: 'Moratorium→Achievement' and 'Moratorium→Confusion'. These two categories were suggested by the data and have not been properly defined. They are not new in the sense that they do not fit into Erikson's framework and they can be seen as sub-categories of the 'Moratorium' category.

Subjects classified as Moratorium→Achievement obtain scores which suggest that they have a more definitive sense of identity than those classified as Moratorium but their scores do not fit all the criteria for Identity-Achievement. These subjects seem to be in the process of consolidating their identities and making tentative commitments.

The scores of subjects classified as Moratorium→Confusion suggest that these subjects are experiencing some identity confusion but it was often difficult to assess the degree of ego disintegration and confusion present. It is necessary to distinguish between feelings of confusion which are a 'normal' concomitant of identity formation and identity confusion proper. The latter is a failure to resolve the identity crisis resulting in a more or less stable debilitating

and disintegrated condition which usually only emerges in late adolescence according to Erikson. On the other hand, the experience of confusion during the moratorium stage does not necessarily mean that the identity crisis will not be successfully resolved.

By definition the classification 'Identity-Confusion' is only appropriate for those subjects who have failed to resolve their identity crises and not for subjects still in the moratorium stage. Subjects classified as Moratorium→Confusion are still in the process of identity formation and it was almost impossible to predict from the available data whether they would succeed in resolving their identity crises or not (some may even opt for a negative identity).

The classification 'Moratorium' was used for those subjects whose scores suggest that they are forming an identity without undue stress or confusion. The greatest proportion of our subjects were classified in this category which supports Erikson's contention and other research findings (Douvan & Adelson, 1966; Offer, et al, 1970) that the majority of adolescents manage to avoid feelings of confusion during the moratorium stage.

Thus subjects could be classified according to one of eight different categories. As only two were classified as Identity-Achievement they were grouped with the Moratorium→Achievement subjects for statistical purposes. No subjects were actually classified as Identity-Confusion although one girl (in Std. 10) was considered a possible case of identity confusion. Only one boy (also in Std. 10) was classified as Negative-Identity and he was excluded from the statistical analysis but his record is discussed in the section concerned with the individual cases. The greatest numbers of subjects were classified as Moratorium and Foreclosed.

Method of classification:

The steps outlined in this section were not pre-determined but emerged through trial and error.

Step 1: The main criteria for the identity classifications (Table 2.1, p.119) involve scores on the following measures:

Ego Identity Scale,
Peer Nomination Form, sub-scale I,
Janis-Field Feelings of Inadequacy Scale,
Problems Scale,
F-Scale items.

It was not possible to predict a specific range of scores for each identity classification on each measure. The initial step, therefore, was to establish rough cut-off points to determine which scores might be considered high, and which low, for each measure.

The mean scores and standard deviations were calculated for the males and females within each standard to ascertain that there were no unexpected differences between any of the groups (see Appendix C-3). Theoretically, one would expect age differences on the first four measures above and as the mean scores for the three standards tend to differ in the expected directions these differences were disregarded for the present purposes.

One would not expect sex differences in the mean scores on these measures as is the case for the Ego Identity Scale and Peer Nomination Form I. But for the Janis-Field Scale and the Problems Scale the girls obtain consistently higher mean scores than the boys. There seemed no reason to believe that these differences reflect a true difference between the

sexes especially as the girls generally obtain slightly higher mean scores on the Peer Nomination Form. A possible explanation is that the girls were more willing to admit feelings of inadequacy and problems than the boys. The difference on the Janis-Field Scale is so marked (8 points) that the greater variation in the girls' scores cannot account for it. The median scores were calculated for the males and females and found to be similar to the mean scores. Thus it was felt that allowance should be made for the generally higher scores obtained by the girls on the Janis-Field Scale and on the Problems Scale when making the identity classifications and calculating the cut-off points.

Assuming a normal distribution of scores on these measures, one would expect 16% of the subjects to obtain scores greater than the mean-score-plus-one-standard-deviation and 16% of the subjects to obtain scores less than the mean-score-minus-one-standard-deviation. Thus 68% should obtain scores within one standard deviation from mean. This seemed to be a reasonable basis for establishing arbitrary cut-off points. For the Ego Identity Scale and the Peer Nomination Form the mean scores and standard deviations for the total sample were used to calculate the cut-off points but for the Janis-Field Scale and the Problems Scale the male and female samples were treated separately.

The median scores were calculated in order to check whether the scores are distributed equally around the mean, and the frequency distribution graphs for each set of scores are presented in Appendix C-3. It is apparent from these graphs that the scores are more-or-less normally distributed except for the Peer Nomination Form I scores (Table 2) which are slightly skewed. Thus only 11.5% of the total sample obtain PNF I scores below the lower cut-off point (i.e., scores of 90 or less). These cut-off points are quite arbitrary and were used only as a guide in making the identity classifications.

TABLE 3.1 : Calculation of upper and lower cut-off scores.

Scale.		Range of scores.	Median score.	Mean score.	S.D.	Upper Limit.	Lower Limit.
EIS.		15 - 65	45.5	44.9	9.0	53.9	35.9
PNF I.		69 - 162	104.5	106.0	16.3	122.3	90.7
Janis-Field.	M.	7 - 49	23.0	24.0	8.2	32.2	15.8
	F.	10 - 57	30.0	32.1	11.1	43.2	21.0
Problems.	M.	1 - 35	16.0	16.1	7.5	23.6	8.6
	F.	3 - 37	20.0	19.8	7.4	27.2	12.4

High scores on the F-Scale items are the main criterion for the Foreclosed classification. Therefore it was necessary to establish an upper cut-off point only for scores on this measure. According to Marcia's data (1966, 1967, and 1970) approximately thirty percent of the subjects in each study were classified as Foreclosed. Assuming a normal distribution of scores a score can be calculated so that one would expect thirty percent of the sample to obtain scores greater than it. But the mean scores of the three standards decrease with educational level although there are no marked sex differences (see Appendix C-3, Table 5). The variation of scores within each standard is almost equal, and as one would expect roughly equal proportions of subjects with Foreclosed identities in each standard, these mean differences were taken into account in the calculation of the cut-off scores:

TABLE 3.2: Calculation of cut-off scores for the F-Scale items.

	Range.	Median.	Mean.	S.D.	Upper Limit.
Std. 6:	25 - 59	43.5	43.5	8.3	48.0
Std. 8:	18 - 56	40.5	39.5	9.6	44.5
Std. 10:	11 - 56	37.0	36.9	8.8	41.5

Step 2: Once these arbitrary cut-off points had been established, each subject was roughly classified on the basis of the criteria in Table 2.1 (which includes classifications on the Vocational Plans Questionnaire as one of the criteria).

Step 3: Subjects were then arranged in groups according to their rough identity classifications within each standard and sex group, and their scores on the main measures were recorded (as in Appendix C-4). These sheets of scores were then carefully studied to see whether the scores of subjects in the same identity classification conformed to an observable pattern or not, and to see whether the patterns for different identity classifications were observably different from each other and in which respects (mean scores were also calculated).

This was done for two main reasons: firstly, to satisfy myself that this attempt to make classifications according to different stages and types of identity formation was worth pursuing; and secondly, to identify any other patterns of scores which might be found in the data. The classification of any subject whose scores failed to fit the general pattern for his classification (i.e., in relation to scores of other subjects in the same classification) was queried, and the classifications of all subjects with borderline scores were queried.

Step 4: The next step involved the appraisal of each subject's total configuration of scores and responses in terms of Erikson's theory. The Profile (Appendix C-1) for each subject was used here and item responses on some scales and questionnaires (e.g., the Problems Scale,

Values Questionnaire and Peer Nomination Form) were also taken into account. This more or less subjective appraisal usually confirmed the rough classifications made in Step 2 but it was useful for unusual or borderline cases. At this point about 75% of the sample were given definite classifications. The remaining 'queries' were each given a classification and a possible alternative classification (in most cases).

Reliability: In order to obtain some indication of the reliability of the classification procedure a random sample of 25 male records were submitted to an independent judge for classification. He was provided with the definitions, the table of criteria and the tables of means and cut-off scores. As the original classifications were made with a knowledge of each subject's age this may have biased the judge. Therefore the reliability sample's numbers were changed and their ages were not recorded.

The sample used for the reliability estimate contained quite a large percentage (40%) of subjects who had not been definitely classified (i.e. 'queries'). This was taken into account when assessing the percentage of agreement between the two judges, which is as follows:

Agreement: 18 cases (72%)
Partial Agreement: 5 cases (20%)
Disagreement: 2 cases (8%)

Step 5: The seven records for which there was no absolute agreement and the remaining records which had been queried in Step 4 were then submitted to the same judge who classified them independently. These subjects were given the classification on which both judges agreed.

In those cases where the second judge was unable to make a definite classification or where there was still disagreement, the records were discussed until some agreement was reached. In the final analysis this procedure resulted in changing the original classifications of only 7% of the sample (7 males and 4 females).

Nevertheless in a number of cases the final classifications were quite arbitrarily as the data was either insufficient or too ambiguous to make definite classifications. In general, the subjects who were difficult to classify were those who obtained borderline F-Scale scores, and the subjects who were easiest to classify were those manifesting some evidence of identity confusion (Moratorium→Confusion) although it was difficult to assess the degree of confusion present. On the whole, the girls presented fewer problems in classification than the boys.

The data for each subject (identified by a number) is recorded on separate sheets in Appendix C-4. The subjects are grouped according to Identity Classification and within each category according to sex and school standard. The subjects who were difficult to classify are identified by a '?' in the left-hand margin and in some cases a possible alternative classification is given in brackets (also in the margin).

Some individual cases:

Subject 162 was classified as Identity-Achievement (her scores are presented in Appendix C-4, Table 1). She is in Std. 8 and aged 15 years and 4 months. Immediately one might query her classification because of her age but her scores fulfil the criteria for this classification better than any other. Her Ego Identity Scale score is high (57) and she has high self-esteem (Janis-Field = 10) and a relatively high PNF I score (117). She has chosen art teaching as a career and does well in this subject at school (72%). Although she is not firmly committed to teaching she seems to have definitely decided that art is her field. She has considered other occupations (photography, gym teaching and ballet dancing) and her vocational interests are in accordance with her responses to the Values Questionnaire: "Sport" (item e) is ranked first, "Art, music or plays (cultural activities)" (item d) second, and "Clothes and appearance" (item l) third. Her responses suggest that she has a firm, realistic 'vocational identity'.

She does not appear to have experienced many problems in establishing her identity (Problems score = 3), and she reports that she gets on well with both her parents and has a few close friends (rating scales). She is accepted by her peers (PNF II = 110). Her F-Scale score is low (23) and she seems to have established her independence (scores 9 out of 10 on EIS sub-scale II). The total configuration of responses suggests that she is one of the lucky adolescents whose identity formation has not been hindered by undue conflict. Her strong interest in art has probably provided an anchor for her sense of identity and it is an interest which will not clash severely with the roles of wife and mother.

This case illustrates the general method employed in making the classifications. Only one other subject's record will be discussed in so much detail but certain aspects of some subjects' records will be mentioned to illustrate various problems encountered and interesting findings.

Subject 207 (Appendix C-4, Table 1) was classified as Moratorium→Achievement because in general his scores fit the pattern for this category, but his PNF I scores is rather low (100). He is also considered rather effeminate by his peers (PNF III = 58) and he does not do very well academically (37% aggregate). Both of these factors may influence PNF I scores adversely. He is one of the few subjects whose value orientation is entirely social (III a) and he has chosen Hotel Management as a career. He could probably do better academically (I.Q. = 112) but he does not seem to be motivated: he ranks "Doing well in school work and examinations" (item a) eighth on the Values Questionnaire. This boy's identity does not seem to be traditional 'masculine' type but there is no evidence of maladjustment or confusion in his record.

Twelve percent (N = 19) of the sample were classified as Moratorium→Confusion as their scores show some evidence of identity confusion (Appendix C-4, Table 4). There is only one subject (230) who might be considered for the classification Identity-Confusion because she obtains a very low EIS scores (15). It was felt, however, that on the basis of the available data none of the subjects could be classified as Identity-Confusion with any certainty. On the whole the scores of subjects in the Moratorium→Confusion category conform to a very definite pattern: low EIS scores, relatively low PNF I scores and high Janis-Field and Problems scores.

There are two brothers in Std. 6 (012 and 013) who were both classified in this category. The older one (013) only answered some items of the EIS and so his scores were not included in the statistical analysis. He obtains a very high Problems score(35) and his major problems concern family relations (items 5 and 10), money matters (item 4) and school work (item 1). His Janis-Field scores (19) is relatively low and may be defensive. He also obtains a very low PNF I score (69). His first choice for an occupation is Bookkeeping to which he is not committed. He gives Cartoonist and Radio Technician as alternatives and has considered being a Fireman, a Terrorist and a Radio Operator in the past. His brother's first choice is 'Mountain Police' with Circus Clown and Traffic Cop as alternatives, and Detective and Film Star considered in the past. Although many of the Std. 6 subjects have considered 'glamorous' occupations, the responses of these two tend to be atypical. 013 also considered himself a 'rebel' in school (Conduct). The younger brother (012) seems to be more serious-minded and is one of the few subjects who ranks "Helping other people" (item 3) first on the Values Questionnaire.

Only one Std. 10 boy (213 - Appendix C-4, Table 4) was classified as a Negative-Identity by both judges (independently). He is one of the few subjects who comes from an upper-class background (his father is an architect) and he has a high I.Q. (131) but does not do very well academically (41%). He obtains a very low PNF I score (about 80% of his peers nominate him for the Social Contempt item-2) and about 30% consider him to be Confused (item 6) and 42% of his class-mates consider him to be generally incompetent (item 14 of the PNF). He is also considered to be socially isolated (PNF II = 69) and he reports

that he has no close friends (level 2 on the Peer Relations rating scale) although he ranks "Having (or making) lots of friends" (item i) first in the Values Questionnaire. His most serious problem concerns relations with his parents (item 5, Problems Scale), and he reports that he cannot communicate with his mother (level 1) and his communication with his father is limited (level 3 - rating scale).

All the above scores and responses suggest that he may be maladjusted but his scores on the self-report measures do not indicate any evidence of confusion: His EIS score (40) is only slightly below average but on the sub-scales his lowest score is for III. Low scores on this sub-scale would indicate a rejection of roles considered proper by one's parents and rejection of, or discomfort in, peer-group activities which one would expect for a Negative-Identity. His Problems Scale score is only average (16) and his Janis-Field score is suspiciously low (7) when seen in the light of his FNF scores. This suggests a defensive response set which one would expect from subjects with Foreclosed or Negative-identities but his low F-Scale score (18) is incompatible with a Foreclosed classification.

He does not consider any of the items of the Values Questionnaire to be important and he marks all the items of the Value Judgements Scale as 'sometimes wrong'. These rather atypical responses and his apparent lack of concern about a career (he does not know what he wants to do and considers 'choosing a career' (item 3 of the Problems Scale) a minor problem) fit the criteria for the Negative-Identity category.

He obtains 8 out of 8 for the Independence items^{*} which could indicate a rebellious attitude (also compatible with a Negative-Identity classification). The impression gained is not of an anti-social, delinquent type but of a potential drop-out.

The only other subjects whose scores suggest definite defensiveness were classified as Foreclosed. These include six boys: 043 and 009 in Std. 6; 103 and 110 in Std. 8; 214 and 273 in Std. 10 (Appendix C-4, Table 5); and one girl (062) although 226 and 231 in Std. 10 (Appendix C-4, Table 6) might also be slightly defensive. These subjects obtain 'good' scores on the self-report measures but low scores on the PNF I (as well as high F-Scale scores).

The seven subjects (3 boys and 4 girls) who were labelled '? Foreclosed' (Appendix C-4, Table 7) obtain extremely high F-Scale scores (mean = 52) but their other scores indicate the presence of some confusion: all except one (157) obtain relatively low scores on the EIS; they all have high scores on the Problems Scale and Janis-Field Scale; and only one of them (028) has committed herself to a vocational choice. On the PNF I their scores are relatively low except subject 181 who has a score of 150 (this subject also obtains the highest marks in his class). Nevertheless, their scores on the Value Judgements Scale and their Value Patterns are characteristic of those obtained by the Foreclosed subjects, and their scores on sub-scale II of the EIS and on the Independence items tend to be low.

* The eight Independence items were included in the EIS in order to revise item-cluster 5 (sub-scale II - see Appendix B-1 (b)). Only two of the items, however, were used in the final form of the EIS. Scores on these eight items were recorded separately because they reflect an important aspect of adolescent development, namely, independence from the family, which was not tapped by any other measure. But because of their doubtful validity they were not considered when making the classifications and they were not included in the main statistical analysis.

Their scores do not fit any of the categories very well. They express authoritarian submissive attitudes, conform to conventional values and lack independence (which is characteristic of a Foreclosed identity) but they also have many problems, low self-esteem and their scores on the EIS and their responses on the Vocational Plans Questionnaire suggest some identity confusion. For statistical purposes two (001 and 195) were classified as Moratorium→Confusion while the rest were classified as Moratorium. In some of the analyses they have been treated as a separate group and it is hoped that this might provide some insight into their psychological functioning.

Nine boys and one girl were classified as Pre-Moratorium (Appendix C-4, Table 7). One would expect subjects in this category to be young but only five (all boys) are in Std. 6. Subject 051 was extremely difficult to classify. He obtains a high EIS score (57) which is atypical for subjects in this classification and he seems to have given some realistic consideration to his vocational plans although he is uncertain about his choice (work in the bank). He has few problems (Problems Scale = 9), high self-esteem (Janis-Field = 15) and he is generally accepted by his peers (PNF II = 130) and considered very masculine (PNF III = 172). Superficially, his scores fit the pattern for Moratorium→Achievement but assessment of his total configuration of scores suggests that he has not differentiated his identity. He seems to be a well-adjusted boy who will probably experience little difficulty in establishing an identity.

004 and 020 do very well academically which probably accounts for their relatively high PNF I scores. Otherwise their scores fit the pattern

for the Pre-Moratorium category. 142 and 156 in Std. 8 and 244 in Std. 10 obtain similar scores on all measures which fit the criteria for the Pre-Moratorium classification. But their high scores on the Independence items (not used for classification) suggest that they might be misclassified.

Subject 179 was queried because he obtains a higher Janis-Field score (26) than most subjects in this category. He seems to be socially isolated (PNF II = 77) and he considers himself a 'Lone wolf' (Peer Relations rating scale). He is also considered very effeminate by his class-mates (PNF III = 41). The only female in this category, 193, was also difficult to classify and she was originally classified as Moratorium.

Although the scores of subjects in this group (Pre-Moratorium) conform to a fairly distinct pattern which is compatible with the criteria for this category, there were doubts about the classifications of almost all these subjects. It is cases such as these which highlight the inadequacy of the available data for assessing the psychological functioning of individual cases.

The scores of subjects in the Moratorium and Foreclosed categories (Appendix C-4, Tables 2, 3, 5 and 6) tend to cover quite a wide range, especially on the EIS, PNF I and Janis-Field measures. This may reflect varying degrees of psychological adjustment which one would expect in the Moratorium and Foreclosed classifications. But on the F-Scale the Foreclosed subjects obtain high scores while the Moratorium subjects obtain moderate to low scores; and on the Problems Scale the

Foreclosed subjects tend to get low scores while the Moratoriums get moderately high scores. In the following section the distribution of scores within each Identity Classification is discussed for each of the main variables separately.

Effectiveness of the identity classification criteria:

In order to establish whether the criteria used in making the identity classifications were effective, on the whole, the mean scores of subjects in each identity category should differ from one another and one would expect some of these differences to reach significance. On the other hand, if the mean scores fail to differ in the expected direction, either the measuring instrument is invalid or the criterion is invalid (the latter may throw some doubt on the underlying theoretical model). If none of the criterion measures discriminate between the Identity Classifications, then one would have to conclude that the classifications are meaningless.

Differences between the mean scores for each Identity Classification were tested using a one-way analysis of variance. These results and the distribution of scores within each Identity Classification are presented for each of the five main criterion measures, and the 'Vocational-Identity' classifications are compared with overall Identity Classifications.

Ego Identity Scale scores:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.*</u>
Criterion:	High scores.	Moderate scores.	Low scores.	?	Below average.
Mean:	52.2	45.1	30.8	48.2	42.3
S.D:	5.7	6.1	6.8	7.4	7.3

The one-way analysis of variance obtained an $F(4/149) = 29.97$ which is highly significant. Multiple comparisons of the mean scores (see Appendix C-5, Table 1) found that:

- (1) the mean score for the Moratorium→Achievement Ss is significantly different from the mean scores for the Moratorium Ss, the Moratorium→Confusion Ss and the Pre-Moratorium Ss, but it is not significantly different from the mean score for the Foreclosed Ss;
- (2) the mean score of the Moratorium→Confusion Ss is significantly different from the mean scores for all the other categories;
- (3) the mean scores for the Moratorium Ss, Foreclosed Ss and Pre-moratorium Ss are not significantly different from each other.

Although these differences are in the expected direction and the differences which reach significance confirm general expectations, there tends to be a considerable amount of overlap in the scores of subjects in all categories except the Moratorium→Confusion category

* In all tables these abbreviations are used:

- 'M→Ach' = Identity-Achievement Ss and Moratorium→Achievement Ss;
- 'Mora' = Moratorium Ss;
- 'M→Con' = Moratorium→Confusion Ss;
- 'Fore' = Foreclosed Ss;
- 'Pre-M' = Pre-Moratorium Ss.

(see Appendix C-6, Table 1). Only 44% of the Moratorium→Achievement Ss obtain 'high' scores^{*} but none of these Ss obtain 'low' scores. 89% of the Moratorium Ss obtain 'moderate' scores and the majority (58%) obtains scores above the general mean.

There is a considerable amount of variation in the EIS scores of the Foreclosed Ss: 25% obtain 'high' scores and 68% obtain 'moderate' scores. Thus the EIS does not discriminate between subjects with Foreclosed identities and those in the Moratorium or Moratorium→Achievement Achievement categories. The Pre-Moratorium Ss tend to get low scores on the EIS: 70% obtain scores below the general mean. The classification that the EIS scores do distinguish from the rest is the Moratorium→Confusion category: 80% of the subjects in this category obtain 'low' scores while very few subjects in any of the other categories obtain scores in this range.

Peer Nomination Form, sub-scale I scores:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Criterion:	High Scores.	Moderate scores.	Low scores.	Below average.	Moderate scores.
Mean:	112.7	106.7	97.1	107.0	103.5
S.D.:	14.0	16.1	9.8	18.2	13.5

The analysis of variance (Appendix C-5, Table 2) obtained an $F(4/149) = 2.47$ which only just reaches significance and none of the mean scores are significantly different from any of the others although the difference between the mean of the Moratorium→Achievement Ss and the mean of the

^{*} In the discussions of score distributions in the following pages, 'high' refers to scores above the upper cut-off score (for the relevant variable); 'moderate' refers to scores within one standard deviation from the general mean; and 'low' refers to scores below the lower cut-off score (as in Tables 3.1 and 3.2).

Moratorium→Achievement Ss and the mean of the Moratorium→Confusion Ss (15.6 points) almost reaches significance. The distribution of scores (Appendix C-6, Table 2) shows that the PNF I scores distinguish relatively well between the Moratorium→Achievement Ss and the other Moratorium categories. 77% of this group obtain scores equal to or above the general mean (106.0) while only 37% of the Moratorium Ss and 20% of the Moratorium→Confusion Ss obtain similar scores. But 11% of the Moratorium Ss do obtain 'high' scores on this measure and it is interesting to note that very few (15%) of the Moratorium→Confusion Ss obtain 'low' scores (below 91) although the majority (65%) obtain scores within one standard deviation below the mean (91 - 105).

It was predicted that subjects with Foreclosed identities would obtain relatively low scores on this measure, but there is a marked sex difference within the Foreclosed group. The mean score for the males is 101.5 while the mean score for the females is 114.4, which is even higher than the mean score for the Moratorium→Achievement Ss (112.7). 32% of the Foreclosed girls obtain 'high' scores in contrast to 13% of the Foreclosed boys, and only one girl (4%) obtains a 'low' score in contrast to 23% of the boys. Although quite a large percentage of both groups obtain scores below the general mean it is apparent that the prediction holds only for the boys in Std. 6. and 8. Most of the Std. 10 boys classified as Foreclosed tend to obtain scores above the general mean (mean = 112.2).

Janis-Field Feelings of Inadequacy Scale:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Criterion:	Low scores.	Moderate scores.	High scores.	Below average.	Low scores.
Mean:	19.6	29.1	37.0	25.9	17.5
S.D.:	6.1	8.2	8.8	10.5	6.5

The analysis of variance (Appendix C-5, Table 3) obtained an $F(4/149) = 13.01$ which is significant at beyond the .05 level.

- (1) The mean score for the Moratorium→Achievement Ss is significantly different from the mean scores for the Moratorium Ss and the Moratorium→Confusion Ss.
- (2) The mean score of the Moratorium Ss is significantly different from the mean scores for all the other categories except the Foreclosed Ss.
- (3) The Moratorium→Confusion mean score is significantly different from the means for all the other categories.
- (4) The mean score for the Foreclosed Ss is only significantly different from the Moratorium→Confusion mean.
- (5) The Pre-Moratorium mean (which is the lowest) differs significantly from the means for the Moratorium and Moratorium→Confusion Ss, and it is almost significantly different from the mean for the Foreclosed Ss.

The girls obtain consistently higher mean scores on this measure than the boys regardless of identity classification although the difference is small for the Moratorium→Achievement Ss:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>
Males:	19.1	24.9	33.5	23.0
Females:	21.0	33.7	41.6	30.0

The distribution of scores within each category (Appendix C-6, Table 3) shows that there is a considerable amount of overlap in the Janis-Field scores. 83% of the Moratorium→Achievement Ss have above average self-esteem and none have very low self-esteem. 89% of the Moratorium Ss obtain 'moderate' scores on the Janis-Field and none have very high self-esteem. Most of the Moratorium→Confusion Ss have below average self-esteem with 52% obtaining 'high' scores (i.e., low self-esteem). The greatest variation is in the scores of the Foreclosed Ss (S.D. = 10.5) although the majority (65%) have moderately high self-esteem according to their responses on the Janis-Field. Most of the Pre-Moratorium Ss have high self-esteem ('low' scores).

Problems Scale scores:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Criterion:	Low scores.	Moderate scores.	High scores.	Low scores.	Low scores.
Mean:	12.2	21.7	27.2	13.1	8.5
S.D.:	4.4	5.2	5.6	4.9	3.3

The analysis of variance (Appendix C-5, Table 4) results are highly significant: $F(4/149) = 50.38$.

- (1) The mean score for the Moratorium Ss differs significantly from the mean scores of all the other categories.
- (2) The Moratorium→Confusion mean differs significantly from the mean scores for all the other categories as well.
- (3) The mean scores for the Moratorium→Achievement Ss, Foreclosed Ss and Pre-Moratorium Ss do not differ significantly from each other.

The distribution of scores within each category (Appendix C-6, Table 4) shows that this measure tends to differentiate better between the categories than the others as one would expect from the high F value obtained in the analysis of variance. It is the only measure which distinguishes the Moratorium Ss from all the other categories. Over 80% of the Moratorium→Achievement Ss and Foreclosed Ss and all the Pre-Moratorium Ss report fewer problems than average. Most of the Moratorium Ss (69%) obtain moderately high scores (above average) while 71% of the Moratorium→Confusion Ss obtain 'high' scores (many problems).

Scores on the F-Scale items:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Criterion:	Below average.	?Average scores.	?Average scores.	High scores.	?Average scores.
Mean:	31.6	36.4	40.3	48.0	34.5
S.D.:	7.6	8.6	6.7	5.3	6.2

The analysis of variance (Appendix C-5, Table 5) is highly significant:

$F(4/149) = 27.07$. The multiple comparisons tests found that:

- (1) the mean score for the Foreclosed Ss differs significantly from the mean scores for each of the other classifications;
- (2) the mean score for the Moratorium→Confusion Ss differs significantly from the mean score for the Moratorium→Achievement Ss.

The distribution of scores within each category (Appendix C-6, Table 5) shows that 73% of the Foreclosed Ss obtain scores above the upper cut-off point while very few subjects in any of the other classifications obtain scores of this magnitude. The 14 Foreclosed Ss (27%) who obtain scores in the middle range tend to have scores which are just below the upper cut-off scores. About half the Moratorium→Achievement Ss (55%) and Moratorium Ss (50%) and the majority of the Pre-Moratorium Ss (70%) obtain relatively low scores on the F-Scale items. In contrast 74% of the Moratorium→Confusion Ss obtain scores in the middle range as their higher mean score indicates.

Vocational Plans Questionnaire classifications:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Voc. Ach.	50%	--	--	8%	--
Voc. M→Ach.	17%	9%	9%	19%	--
Voc. Mora.	22%	52%	54%	15%	20%
Voc. M→Con.	--	19%	24%	6%	--
Voc. Fore.	11%	4%	5%	23%	10%
Voc. Pre-M.	--	16%	9%	29%	70%

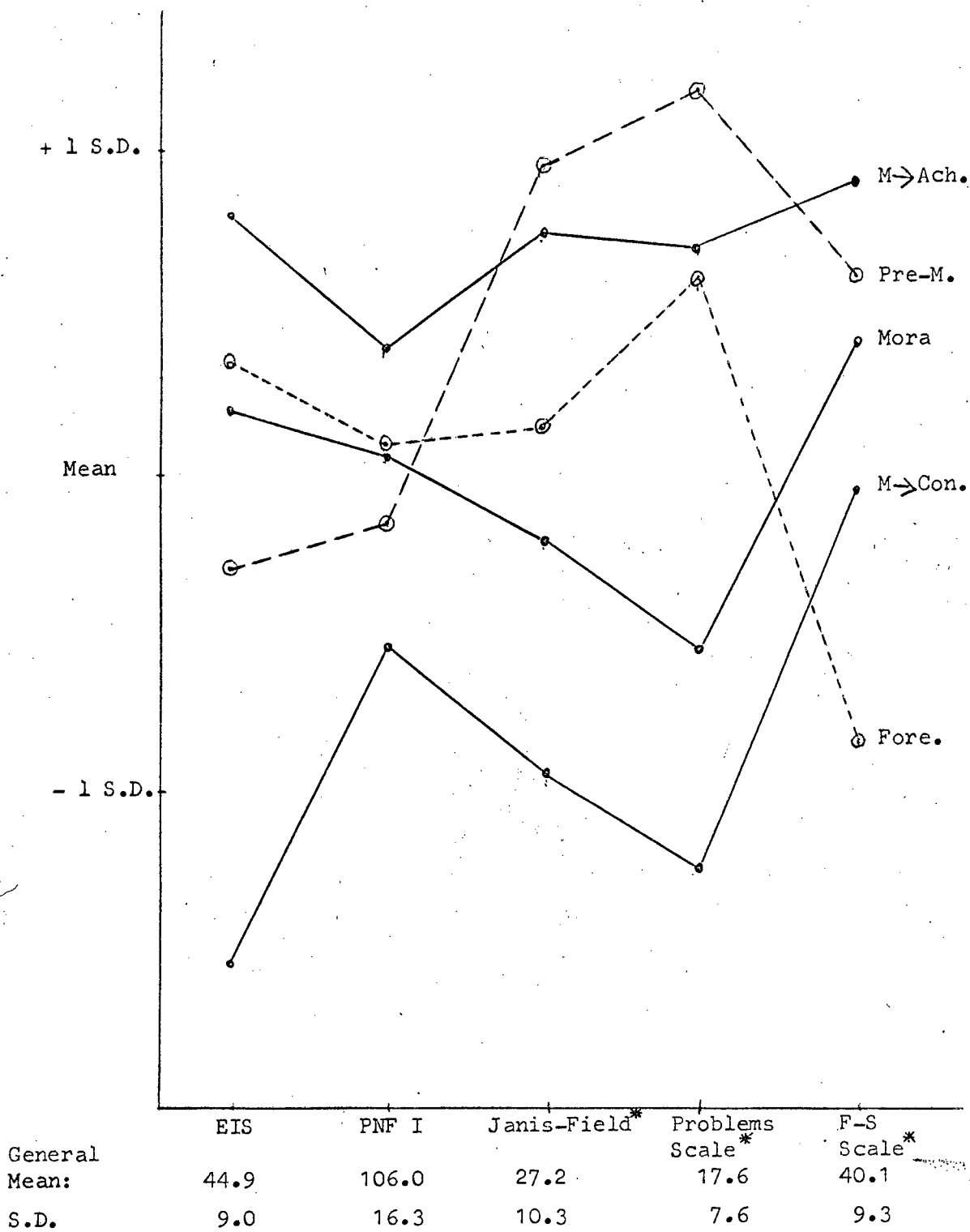
These results show that there is only a moderate amount of agreement between the overall identity classifications and the 'vocational identity' classifications. For the Moratorium→Achievement Ss, Moratorium Ss and the Pre-Moratorium Ss the degree of agreement is satisfactory. But only a quarter of the Moratorium→Confusion Ss show evidence of being confused about their vocational identities although the majority of this group (54%) are classified as Vocational-Moratorium (i.e., their vocational choices are under consideration and they are fairly concerned about this issue).

Only 23% of the Foreclosed Ss respond to the Vocational Plans Questionnaire according to the criteria for a Foreclosed-Vocational-Identity although the majority (73%) express commitment or tentative commitment to a vocational choice. Some of these subjects seem to have given their choice enough consideration to be classified as Vocational-Identity-Achievement or Vocational-Moratorium→Achievement, but quite a number express commitment to an unrealistic (usually ambitious) choice and have been classified as Vocational-Pre-Moratorium. Very few indicate they are very concerned about choosing a career (see Appendix H-1, Table 5.). The majority of the Foreclosed boys (70%) are classified as Foreclosed or Pre-Moratorium in their vocational identity while most of the girls seem to have given their vocational choice some consideration and they tend to be less willing to make firm commitments (see Appendix C-6, Table 6).

Summary: In Figure 2.1 the mean scores (converted to standard scores) for each Identity Classification are represented graphically to show the general patterns.

Moratorium→Achievement, Moratorium and Moratorium→Confusion: On all five measures the Moratorium→Achievement Ss obtain 'higher' mean scores than the Moratorium Ss, who obtain 'higher' mean scores than the Moratorium→Confusion Ss as one would expect on the basis of the criteria. Theoretically, scores on the first four measures (i.e., excluding the F-scale items) should differentiate significantly between these three categories. This is the case for the EIS, Janis-Field and Problems Scale scores but not for the PNF I scores. Problems Scale scores differentiate best between the Moratorium→Achievement and Moratorium groups, and EIS and Problems Scale scores differentiate best between

FIGURE 2.1: Identity Classification Mean Scores
(converted to standard scores)



* Scores on these scales have been inverted.

the Moratorium and Moratorium→Confusion categories (according to the distribution graphs in Appendix C-6). The significant difference between the Moratorium→Achievement and Moratorium→Confusion categories on the F-scale items was not expected and may prove a significant finding. The criteria involving vocational plans are effective for the Moratorium→Achievement Ss (the majority have either established or are consolidating their 'vocational identities' and the Moratorium Ss but about half of the Moratorium→Confusion Ss are classified as 'Vocational-Moratorium').

Foreclosed: In accordance with the criterion, the Foreclosed Ss all obtain high F-scale scores and their mean score (48.0) differs significantly from the F-Scale means of each of the other categories. On the EIS, PNF I and Janis-Field Scale the Foreclosed Ss obtain quite a wide range of scores and these measures fail to differentiate the Foreclosed Ss from the Moratorium→Achievement, Moratorium or Pre-Moratorium Ss. On the Problems Scale, however, the Foreclosed Ss obtain a significantly lower mean score (fewer problems) than the Moratorium Ss and the Moratorium→Confusion Ss. The EIS and Janis-Field Scales also differentiate significantly between the Foreclosed Ss and the Moratorium→Confusion Ss.

A marked sex difference has been found in the PNF I scores obtained by Foreclosed Ss: 32% of the girls and 13% of the boys obtain 'high' scores (above 122) while only 4% of the girls and 23% of the boys obtain 'low' scores (below 90). Another interesting finding is that almost half of the 'low' PNF I scores are obtained by Foreclosed subjects. Another sex difference emerges in the Vocational Plans Questionnaire responses: the majority of the Foreclosed males express commitment to a vocational choice and have been classified as foreclosed or pre-moratorium in their

'vocational identities', but the Foreclosed girls are less willing to express commitment to their choices and appear to have given more consideration to their choices.

Pre-Moratorium: A consistent pattern emerges for this small group of subjects which fits the criteria for this classification: relatively low scores on the EIS, PNF I and F-Scale items; and showed lack of concern about vocational plans, and they obtain the lowest mean scores on the Problems Scale (few problems) and Janis-Field Scale (high self-esteem). Their scores differ significantly from the Moratorium→Achievement Ss on the EIS; from the Moratorium Ss on the Problems and Janis-Field scales; from the Moratorium→Confusion Ss on the EIS, Problems and Janis-Field scales; and from the Foreclosed Ss on the F-Scale items.

It will be recalled that the classifications were made on the basis of two main considerations: the set of criteria which an individual's scores fitted best, and the more-or-less subjective appraisal of his total configuration of scores and responses on all measures in terms of Erikson's theory. This flexible and rather subjective method was used because of the unproven validity of both the criteria and the measuring instruments. Therefore it was possible that subjects in different categories might not differ significantly on any measure which would suggest that the classifications are meaningless, or that one or more of the criterion measures might not differentiate between subjects in different identity classifications in the expected direction.

As regards the first possibility, the preceding analysis has shown that each of the five categories does have a fairly distinctive pattern and that the scores of subjects in each classification do differ significantly from each of the other classifications on at least one of the six criterion measures. Therefore the classifications are not meaningless, but whether they truly reflect Erikson's theoretical postulates is another matter. The patterns which emerge in this analysis do fit the criteria which were derived from Erikson's theory and relevant research, and the significant differences which have been found on four of the measures confirm theoretical expectations. But these findings cannot be considered proof of the validity of the criteria because no external criterion was used. The issue is further complicated by the doubtful validity of the measuring instruments but the following analysis should throw more light on this.

Scores on the EIS, Janis-Field and Problems Scales, and on the F-scale items have been found to differentiate significantly between categories in the expected directions, but the PNF I scores do not differentiate significantly between any of the categories. This probably means that the PNF I is not a valid measure of identity versus identity confusion but further analysis is required to establish exactly what this scale is measuring. The amount of agreement between the 'vocational identity' classifications and overall identity classifications is not very great either. The 'vocational identity' classifications are based on responses to a very crude and superficial questionnaire and so there are likely to be a number of errors in these classifications. But on the other hand, vocational plans may not be a very good criterion: it is only one aspect of identity formation and its central role in identity formation is not proven.

The data produced by the preceding analysis should be regarded as descriptive: the findings simply confirm that in general the scores of subjects in a particular identity classification fit the criteria which were laid down for that classification. Further analysis is required to substantiate the validity of the classifications and the validity of the measuring instruments. Nevertheless, a point which has been highlighted by this analysis, especially by the distribution graphs of scores in each category in Appendix C-6, is that none of the criterion measures can be used in isolation to make classifications of this type. Even though scores on the PNF I fail to differentiate between the Identity Classifications, these scores (especially on individual items) were very useful in attempting to reach some understanding of an individual subject's psychological functioning.

2. Tests of the Hypotheses.

Statistical Analysis: The basic design for the statistical analysis of the data involved the following computations:

(1) Product-moment correlations between the scores on all the major variables for thirty-six different groups of subjects. This was done in order to test most of the hypotheses and to analyse the relationships between these variables. The variables involved in this analysis are:

Age,
Ego Identity Scale (EIS) scores,
Peer Nomination Form I (PNF I) scores,
Janis-Field Scale (J-F) scores,
Problems Scale (PS) scores,
F-Scale items (F-S) scores,
Value Judgements Scale (VJS) scores,
Academic Averages (Acad.).

The thirty-six different groups of subjects were based on sex, school standard and identity classification differences. As regards the latter the subjects were divided into two main groups. The first consists of subjects classified as Identity-Achievement, Moratorium→Achievement, Moratorium and Moratorium→Confusion as they are in various stages of developing an identity and their scores on all the scales tend to fall on a continuum. This group is identified by the label 'Developing' in contrast to the second group which consists of all subjects classified as Foreclosed. The Pre-Moratorium Ss (N=10) and the single Negative-Identity were excluded from this part of the analysis.

The number of subjects in each of the thirty-six groups is given in Table 3.3 (next page). When the Foreclosed Ss are divided on the

basis of sex and school standard the numbers in these groups are extremely small and the results should be interpreted with care.

TABLE 3.3: Number of subjects in each sample.

	TOTAL:	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL:	154	55	50	49
Males	93	33	28	32
Females	61	22	22	17
B. DEVELOPING:	92	30	31	31
Males	54	17	16	21
Females	38	13	15	10
C. FORECLOSED:	52	20	15	17
Males	30	11	9	10
Females	22	9	6	7

Separate analyses were conducted for males and female subjects in order to determine whether there are differences between the sexes in the way the variables relate to one another. Douvan & Adelson (1966) contend that there are sex differences in adolescent development but hypothesis 2 of this study is based on the assumption that there are no sex differences in the basic ego processes of identity formation.

The sample is further divided according to school standard because the three age groups correspond with the three major phases of adolescence - early, middle and late, - and it might be found that the intercorrelations between the variables differ in the different phases of development.

The division according to Identity Classification is based on the expectation that correlations between scores on variables related to identity formation will be higher for subjects who are developing their identities than for those who have foreclosed their identities. Those variables which are related to the development of identity should correlate with age for the Developing Ss but not for the Foreclosed Ss because the latter are no longer developing their identities. If these patterns are found in the data, this will provide some evidence for the validity of the Identity Classifications.

(2) Two-way analyses of variance were conducted to analyse differences in mean scores on all the above scales for:

- (a) Sex and School Standard differences (2 x 3 table);
- (b) Socio-economic Status and School Standard differences
(3 x 3 table).

The approximate method for unequal groups devised by Scheffé (1959, pp. 362 - 363) was used in these analyses.

For socio-economic status the subjects were classified according to three categories: I = upper-middle class (mainly business and managerial); II = middle-middle class (mainly clerical and sales); III = lower-middle class (mainly artisans).

A two-way analysis of variance was conducted because it was felt that differences between^{the} socio-economic categories might only emerge in the older subjects (i.e., Std. 10s).

Hypothesis 1 : Scores on a measure of ego identity will increase significantly with age and/or school standard, thus demonstrating a developmental trend in identity formation during the adolescent period.

(1) Ego Identity Scale scores and Age: The scores on the Ego Identity Scale were correlated with age for the total sample and for all the various sub-groups within the total sample in order to test the first part of this hypothesis. For the total sample the ages range from 12 years, 10 months to 19 years, 7 months.

TABLE 3.4 : Correlation Coefficients of EIS scores with Age.

	TOTAL.	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL sample:	.15	-.11	.12	-.11
Males.	.23*	-.05	.31	-.13
Females.	.02	-.16	-.18	-.13
B. DEVELOPING Ss:	.14	-.14	.21	-.06
Males.	.23	-.17	.62*	-.12
Females.	-.01	-.18	-.25	.06
C. FORECLOSED Ss:	.19	-.21	-.15	-.25
Males.	.25	-.40	-.70*	-.27
Females.	.09	.29	-.11	-.50

* $p < .05$;

** $p < .01$;

*** $p < .001$.

The correlation between EIS scores and age for the total sample is .15 which is not significant but it is in the right direction.

Nevertheless EIS scores do increase significantly with age for the male subjects ($r = .23$, $p < .05$), but there appears to be almost no relation between EIS scores and age for the female subjects ($r = .02$). When the correlations for the two identity samples (B and C) are considered this sex difference is still apparent although the correlation coefficients for the Developing males and Foreclosed males do not reach significance.

All the correlation coefficients in the first column of Table 3.4 are for groups of subjects which cut across the school standards and therefore have quite a wide range of age within each sample. To the right of this column are the correlation coefficients for each school standard separately. The age range within each standard is small and therefore one would not expect to find significant correlations between EIS scores and age within these groups. But EIS scores do increase significantly with age for the Developing Std. 8 males ($r = .62$, $p < .05$). The ages range from 15 yrs, 2 mths to 16 yrs, 8 mths for this group of subjects. In contrast, the EIS scores of the Foreclosed Std. 8 males decrease with age ($r = -.70$, $p < .05$). This group is extremely small ($N=9$) and this may be a chance occurrence. The age range and means are similar for both groups.

These results show that EIS scores tend to increase with age during the adolescent period for male subjects but not for female subjects in this population. A positive relationship between EIS scores and age was also found for the Std. 8 boys who are developing an identity.

(2) School standard differences in EIS scores: In order to test the second part of the hypothesis a one-way analysis of variance was conducted to ascertain whether there are significant differences between the mean EIS scores for each standard. The mean scores do increase slightly:

Std. 6: Mean EIS score = 43.4; S.D. = 8.7

Std. 8: Mean EIS score = 44.3; S.D. = 7.5

Std.10: Mean EIS score = 47.3; S.D. =10.1

The F value $(2/151) = 3.25$ is significant at the .05 level (see Appendix D-1, Table 1). However, only the Std. 6 mean differs significantly from the Std. 10 mean.

These results fail to provide unequivocal support for the hypothesis although there is a positive relationship between ego identity as measured by the Ego Identity Scale and age for the male adolescents. There are several factors which may have influenced these results:

(1) The Ego Identity Scale was designed to assess the end-product of adolescent identity formation: a sense of identity versus identity confusion, and therefore it may not be sensitive enough to assess the degree of progress a respondent has made towards the establishment of an identity during the moratorium period. The validity of the EIS and the interpretation of EIS scores will be discussed in greater detail later when more data is available.

(2) According to Erikson, identity confusion usually only manifests itself during late adolescence when the crisis stage is reached. Thus one might expect both an increase in scores for some subjects and a decrease for others, i.e., a greater range of EIS scores for the older subjects than for the younger subjects. The greatest standard deviation

in scores is for the Std. 10 group (see previous page) which provides some support for this contention, and this factor would reduce the correlation between EIS scores and age.

(3) The age limits for this period are not well-defined, and it is likely that there are very marked individual differences in the rate of psychosocial development during adolescence just as there are marked differences in the rate of physical development during this stage. This in itself would not explain the results obtained but it would suppress the amount of correlation.

(4) The sample contains only two subjects who appear to have established an identity and only 10% seem to be consolidating their identities. If a fourth group of young adults (post high school) had been included the hypothesized age trend may have been clearer. Nevertheless one would expect subjects classified as Moratorium→Achievement to be significantly older than those classified as Moratorium or Pre-Moratorium.

(3) Identity Classifications and Age:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Mean ages.	17.5	15.3	15.4	15.7	14.7
S.D.	1.0	1.6	2.0	1.8	1.4

The analysis of variance (Appendix D-1, Table 2) obtained an $F(4/149) = 6.9$ which is significant at beyond the .05 level. The

multiple comparisons tests found that the mean age of the Moratorium→Achievement Ss is significantly different from the mean ages of each of the other identity categories. The mean age of the Pre-Moratorium Ss is lowest as one would expect but it is only significantly different from the Moratorium→Achievement mean. It may be significant that the greatest variation in age is for the Moratorium→Confusion subjects.

(4) Identity Classifications and School Standard:

	<u>M→Ach.</u> (N=18)	<u>Mora.</u> (N=54)	<u>M→Con.</u> (N=21)	<u>Fore.</u> (N=52)	<u>Pre-M.</u> (N=10)
Std. 6	-	20 (36%)	11 (20%)	20 (36%)	5 (8%)
Std. 8	3 (6%)	24 (48%)	4 (8%)	15 (30%)	4 (8%)
Std. 10	15 (30%)	10 (20%)	6 (12%)	17 (34%)	1 (2%)

One would expect a larger proportion of subjects in Std. 10 to be classified as Moratorium→Achievement than in Std. 6 or 8 which is the case. There are more Std. 10s classified in this category than in the Moratorium category. As expected there are roughly equal proportions of subjects in each standard classified as Foreclosed, and the numbers of subjects classified as Pre-Moratorium tend to decrease with age. The greatest number of Moratorium→Confusion Ss are in Std. 6 (20% of this group) while 12% of the Std. 10 group evidence some degree of identity confusion. This finding tends to contradict Erikson's contention that identity confusion usually only manifests itself in late adolescence. But only one of these subjects (in Std. 10) was considered a possible case of identity confusion proper, and the only subject who was tentatively classified as a Negative-Identity is also in Std. 10 (i.e., late adolescence).

Despite the fact that EIS scores failed to correlate very well with age, the age differences in the Identity Classifications do provide fairly strong support for our general theoretical expectations regarding the relationship between age and identity formation. Nevertheless these results do have possible theoretical implications which will be discussed when the remaining data relevant to age trends has been presented.

Hypothesis 2: There will be no significant difference between male and female adolescents in their scores on a measure of ego identity.

This hypothesis was based on the assumption that boys and girls do not differ in the basic ego processes involved in the establishment of an identity. The content of their identities would differ and they might develop at different rates.

A two-way analysis of variance for sex and standard differences was conducted (Appendix D-1, Table 3). The table of EIS mean scores for each sub-group is as follows:

	Std. 6.	Std. 8.	Std. 10.	Row Means.
Males.	42.3	45.7	47.5	45.2
Females.	45.0	42.6	46.9	44.8
Column Means.	43.6	44.1	47.2	45.0

The row means (sex differences) do not differ significantly:

$F(1/148) = .06$; and therefore the hypothesis is confirmed by the data. But when the sample is divided into males and females, the column means (standard differences do not vary significantly either: $F(2/148) = 2.23$. It is apparent that the variance due to age (standard) is only to be found in the male sample as would be expected from the correlations between EIS scores and age. For the girls, the mean score for the Std. 8s is actually lower than the mean for the Std. 6s but this is unlikely to be significant. The reason for this lack of relationship between EIS scores and age in female adolescents may become apparent when the remaining variables are analysed.

Gold & Douvan (1966) suggest that girls tend to keep an 'open identity' until they marry. If this is correct one would expect proportionately fewer girls than boys to be consolidating their identities. And if Marcia & Friedman's suggestion (1970) that Foreclosure is a more adaptive form of identity for women is correct, one might expect proportionately more girls than boys to be classified as Foreclosed.

The distribution of boys and girls according to Identity Classification is as follows:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Males.	13.7%	29.4%	14.7%	31.6%	9.5%
Females.	8.2%	42.6%	11.5%	36.0%	1.6%

The data tends to support both above suggestions but the differences are so small that they would not be significant. The greatest proportion of girls are classified as Moratorium but there is only one girl classified a Pre-Moratorium. The distribution of subjects in each Identity Classification according to sex and standard is presented in Appendix D-1, Table 4.

Hypothesis 3: Scores on a measure of ego identity will be positively related to scores on the peer nomination measure.

As sub-scale I of the Peer Nomination Form contains items which seem to reflect the ego identity versus identity confusion continuum, only these scores were correlated with Ego Identity Scale scores to test this hypothesis. This was done for the total sample and for all the various sub-groups within the sample.

TABLE 3.5: Correlation Coefficients of EIS scores and PNF I scores.

	TOTAL.	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL sample:	.27 ***	.22	.29*	.27
Males.	.18	.11	.25	.11
Females.	.42 ***	.30	.54 *	.53*
B. DEVELOPING Ss:	.35 ***	.35	.44*	.28
Males.	.35*	.40	.40	.24
Females.	.37*	.30	.52*	.39
C. FORECLOSED Ss:	.13	.03	-.07	.15
Males.	-.09	-.39	.21	-.33
Females.	.44*	.29	.77	.66

* $p < .05$;

** $p < .01$;

*** $p < .001$.

For the total sample EIS scores and PNF I scores are significantly correlated ($r = .27$, $p < .001$) but it appears from these results that this relationship is only significant for the female subjects ($r = .42$, $p < .001$). When the sample is divided according to identity classification interesting differences emerge. For the Developing sample, the degree of correlation between these measures is greater than for the total sample, and the correlation coefficients for the Developing males ($r = .35$) and females ($r = .37$) are both significant at the .05 level. Within standards the scores of the Developing subjects correlate reasonably well although only two (for Std. 8 subjects) reach significance.

In the Foreclosed sample the overall correlation coefficient ($r = .13$) is small and does not reach significance, but for the Foreclosed females the degree of relationship between these measures is generally high. It is the scores of the Foreclosed males which fail to correlate and this probably accounts for the insignificant correlation coefficient for the general male sample. The EIS scores and PNF I scores of the Std. 6 and Std. 10 Foreclosed males actually correlate negatively (but not significantly) and this finding may be of interest.

It may be concluded from these results that the data provides general support for the hypothesis, but as the Ego Identity Scale and the Peer Nomination Form, sub-scale I were both designed to measure identity one might expect a higher correlation between these measures. It may be that the instruments measure different aspects of identity or that one or both measures are not entirely valid. It will be recalled that

the PNF I scores did not discriminate very well between the Identity Classifications. The additional data may give some insight into what these instruments are actually measuring.

Hypothesis 4: Scores on a measure of ego identity will be positively related to scores on a measure of self-esteem.

As the Janis-Field Feelings of Inadequacy Scale was used as the measure of self-esteem the correlations between scores on this measure and scores on the Ego Identity Scale must be negative in order to provide support for the hypothesis.

TABLE 3.6: Correlation Coefficients of EIS scores and Janis-Field scores.

	TOTAL.	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL sample:	-.41 ***	-.28 *	-.41 **	-.51 ***
Males.	-.41 ***	-.55 ***	-.25	-.37 *
Females.	-.46 ***	-.13	-.45 *	-.72 **
B. DEVELOPING Ss:	-.49 ***	-.33	-.41 *	-.70 ***
Males.	-.56 ***	-.68 **	-.28	-.65 **
Females.	-.48 **	-.10	-.47	-.90 ***
C. FORECLOSED Ss:	-.33 *	-.19	-.55 *	-.27
Males.	-.19	-.50	-.23	.26
Females.	-.40	.00	-.33	-.53

* $p < .05$;

** $p < .01$;

*** $p < .001$

The correlations between EIS scores and Janis-Field Scale scores are significant at beyond the .001 level for the total sample ($r = -.41$)

and for the total male sample and the female sample. Within standards the degree of correlation between the measure tends to increase with age.

As might be expected, the degree of correlation between these measures is greater for subjects classified as Developing ($r = -.33$, $p < .05$).

Within the Developing sample the correlation coefficients of the Std. 10 subjects are of the greatest magnitude, while those for the Std. 6 females ($r = -.10$) and the Std. 8 males ($r = -.28$) are relatively low and insignificant.

Within the Foreclosed sample, the correlation between EIS scores and Janis-Field scores only reaches significance for the Std. 8s ($r = -.55$, $p < .05$). The remaining correlations are in the expected (negative) direction except for the Std. 6 females (.00) and the Std. 10 males (.26).

It may be concluded that in general the scores on the Ego Identity Scale are negatively related to scores on the Janis-Field Scale and that this relationship tends to be greater for subjects classified as Developing an identity than for those with Foreclosed identities. Thus the hypothesis is confirmed by the data. It was also noted that the degree of relationship between the scores on these measures tends to increase with age for the general samples and for the Developing subjects.

Hypothesis 5 : Scores on a measure of ego identity will be negatively related to composite scores based on the number and degree of problems reported.

TABLE 3.7: Correlation Coefficients of EIS scores and Problems Scale scores

	TOTAL.	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL sample:	-.43 ***	-.33 *	-.31 *	-.59 ***
Males.	-.43 ***	-.46 **	-.16	-.56 ***
Females.	-.44 ***	-.27	-.45 *	-.67 **
B. DEVELOPING Ss:	-.44 ***	-.29	-.28	-.61 ***
Males.	-.49 ***	-.52 *	-.03	-.62 **
Females.	-.40 *	-.15	-.47	-.59
C. FORECLOSED Ss:	-.37 **	-.23	-.46	-.42
Males.	-.34	-.44	-.40	-.17
Females.	-.40	.03	-.97 **	-.70

* $p < .05$;

** $p < .01$;

*** $p < .001$.

The negative correlations between EIS scores and Problems Scale scores are significant at beyond the .001 level for the total sample and for both sex groups. For each standard the correlation coefficients also reach significance but the degree of relationship between scores on these measures is greatest for the Std. 10 subjects ($r = -.59$, $p < .001$). Once again, the degree of relationship between EIS scores and the Problems Scale tends to be greater for subjects classified as Developing an identity than for those with Foreclosed identities although the difference is not as marked as for correlations between EIS scores and Janis-Field scores.

Within the Developing sample the correlations between scores on the EIS and Problems Scale tend to be greater for the male subjects than for the females, and greatest for the Std. 10s. The correlation coefficients for the Developing Std. 6 females ($r = -.15$) and Std. 8 males ($r = -.03$) are low and insignificant. The pattern of correlations obtained for the Developing subjects is similar to pattern of correlations between EIS scores and Janis-Field scores for the same groups of subjects.

Within the Foreclosed group all the correlation coefficients are in the expected direction and the majority are quite high (except for the Std. 6 females and Std. 10 males) but only one reaches significance: for the Foreclosed Std. 8 females ($r = -.97$, $p < .01$). These findings are interesting because the Foreclosed subjects tend to receive low scores on the Problems Scale (mean = 13.1) and the range of scores is small (S.D. = 4.9). This is in marked contrast to the Developing subjects who obtain a mean Problems Scale = 21.1 with a standard deviation of 7.1.

It may be concluded that the hypothesis is confirmed as the correlations between scores on the EIS and the Problems Scale are highly significant for the general samples and for the Developing subjects while the degree of relationship between these measure is also in the expected direction for the Foreclosed groups.

Hypothesis 6 : Scores on a measure of ego identity will be positively related to academic performance within school standards.

Each subject's average mark (converted to a percentage) in the mid-year examinations was used as an index of academic performance. The hypothesis was confined to correlations 'within school standards' because average marks obtained in examinations tend to decrease with age: the Std. 6 mean is 55.7%; the Std. 8 mean = 47.8%; and the Std. 10 mean = 48.1%.

TABLE 3.8: Correlation Coefficients for EIS scores and Academic Averages for each School Standard.

	Std. 6s.	Std. 8s.	Std. 10s.
A. TOTAL sample:	-.11	.27	-.04
Males.	-.27	.28	-.13
Females.	..04	.43 *	.15
B. DEVELOPING Ss:	-.02	.28	-.09
Males.	-.06	.21	-.20
Females.	-.01	.41	.16
C. FORECLOSED Ss:	-.02	.22	-.11
Males.	-.47	.42	-.26
Females.	.19	.61	.11

* $p < .05$.

The rationale for this hypothesis was that subjects who are resolving their identity conflicts successfully would have a greater amount of psychic energy available for academic work than subjects who are experiencing identity conflict and therefore one might expect subjects

who obtain high scores on the EIS to do better academically than subjects who obtain low scores. The data available does not confirm this hypothesis although there is a tendency for EIS scores to correlate positively with academic average for Std. 8 subjects regardless of identity classification. The correlation coefficient for the Std. 8 girls (.43) reaches significance at the .05 level.

A one-way analysis of variance was conducted to establish whether the mean academic averages for each Identity Classification vary significantly or not (see Appendix D-1, Table 5) but the $F(1/149) = 1.03$ is not significant. Unfortunately this analysis is contaminated by the age differences in academic averages but the groups were too small to do separate analyses for each standard. The mean scores (Appendix D-1, Table 6) do not suggest that there would be any significant differences for any standard.

Twenty subjects appear to be under-achieving in their school work (based on a large discrepancy between their academic average and I.Q.). The proportion of subjects in each classification who appear to be under-achieving is as follows:

<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre→M.</u>
19%	17%	19%	11%	10%

These differences are very small and unlikely to be significant. The only subject classified as Negative-Identity also appears to be under-achieving in his schoolwork. Of course, apparent under-achievement

in academic work may be the result of poor motivation which may be completely unrelated to identity conflict although not unrelated to the individual's identity.

The above results suggest that there is no general relationship between academic performance and identity formation. In individual cases under-achievement in academic work may indicate the presence of severe psychic conflict or it may reflect a lack of motivation to do well at school.

3. Relationships between the Major Variables.

Ego Identity Scale:

It has been found that scores on the Ego Identity Scale only correlate to some degree with age for male subjects; that there are no significant differences between the EIS scores for male and female adolescents; that EIS scores correlate in the expected direction with scores on the PNF I (particularly for female subjects), on the Janis-Field Scale and on the Problems Scale, and that for these scales the correlation coefficients tend to be greater for subjects classified as Developing a sense of identity than for subjects with a Foreclosed identity; and that there is virtually no relationship between EIS scores and academic averages within school standards. The correlations between EIS scores and all the major measures are presented in Appendix D-2, Table 1.

EIS and the F-Scale items: One would not expect a clear relationship to exist between scores on these two measures. For the total sample there is virtually no correlation at all ($r = -.03$), but for the subjects classified as Developing $r = -.28$ which is significant at beyond the .01 level. For the various sub-groups in the Developing sample the correlation coefficients are all negative although the degree of relationship between these measures is most marked for the Std. 8s ($r = -.40$, $p < .05$), and for the Std. 8 females $r = -.69$, $p < .01$). For the subjects classified as Foreclosed the correlation coefficients also tend to be negative but they are small and none reach significance.

These results show that for subjects who are developing an identity scores on the F-Scale items tend to decrease as scores on the EIS

increase. These results are in line with the findings for the Identity Classifications: Moratorium→Achievement Ss obtained an F-Scale mean scores = 31.6; Moratorium Ss a mean = 36.4, and Moratorium→Confusion Ss a mean = 40.3.

EIS and the Value Judgements Scale: There are no significant correlations between scores on these measures for any of the groups of subjects, and there do not seem to be any trends in the data either.

EIS and Socio-economic Status: A two-way analysis of variance of mean differences in EIS scores for School Standards and Socio-economic classifications was computed (see Appendix D-2, Table 2). The EIS mean scores for the three socio-economic categories (Row Means) do not differ significantly: $F(2/145) = 1.86$. Std. 10 subjects from an upper-middle class background (I) obtain the highest mean score on the EIS (50.7) which is six points higher than the mean score (44.2) of the Std. 10 subjects from a lower-middle class background (III). In Std. 6 and 8 the differences are not marked.

The Column Means (standard differences) were found to vary significantly in the expected direction: $F(2/145) = 3.69$. The mean score for the Std. 6s (43.2) was found to differ significantly (.05 level) from the mean for the Std. 10s (47.7) as was found in the one-way analysis of variance of standard differences in EIS mean scores. Nevertheless the mean EIS scores for the three standards only vary in the expected direction for the subjects classified in the socio-economic categories I and II. The mean scores of subjects from a lower-middle class background (III) do not increase with standard.

Identity Classifications and Socio-economic Status: The distribution of subjects in each socio-economic category according to Identity Classification is as follows:

		<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
S-E	I (upper-middle):	12.5%	46.4%	5.4%	30.4%	3.6%
S-E	II (middle):	7.0%	25.6%	23.3%	32.6%	11.6%
S-E	III (lower-middle):	14.0%	30.0%	14.0%	36.8%	5.2%

Very few subjects from an upper-middle class background (5.4%) manifest any evidence of confusion, while the majority (46.4%) are establishing an identity without undue conflict (Moratorium). Proportionately more subjects in category II than in the other socio-economic categories are classified as Moratorium→Confusion and as Pre-Moratorium while very few category II Ss are consolidating their identities (M→Ach: 7%). The greatest proportion of subjects classified as Moratorium→Achievement and as Foreclosed are from a lower-middle class background.

Although one cannot draw any definite conclusions from these findings, the data suggests that subjects from an upper-middle class background tend to experience the least difficulty in establishing an identity, while subjects in category II most often experience problems in forming an identity. This will be discussed in greater detail later.

The Peer Nomination Form, sub-scale I:

If this instrument is an adequate measure of ego identity one would expect the same relationships to exist between scores on this measure and the other variables as we hypothesized for the Ego Identity Scale. The results of the two-way analyses of variance are presented in Appendix D-3, Tables 1 and 2.

Sex differences in PNF I mean scores: The mean score for the males (103.4) was found to be significantly different from the mean score for the females (109.7) when the sample is divided according to standard and sex: $F(1/148) = 5.87$. This sex difference is particularly marked for the Std. 8 subjects (13.4 points) while there is virtually no difference between the mean scores for the Std. 10 subjects.

Standard differences in PNF I mean scores: In both analyses the amount of variance between the mean scores for each school standard do not reach significance although the small differences which do exist are in the expected direction (for Column Means).

Socio-economic Status differences in PNF I mean scores: Variance due to socio-economic status was not found to be significant either: $F(2/145) = 2.24$. The category I subjects obtain consistently higher mean scores than subjects in the other categories (which are similar), and this is most marked for the Std. 10 subjects: the mean for category I subjects is 117.2; category II = 105.1, and category III = 105.6.

TABLE 3.9: Correlations between PNF I scores and scores on the other measures.

Sample.	Age.	Acad.	J-F.	P.S.	F-S.	VJS.	EIS.
A. TOTAL sample:	.11	.46 ***	.05	-.08	-.04	.02	.27 ***
Males.	.20	.40 ***	-.06	-.15	-.06	-.16	.18
Females.	.03	.52 ***	.00	-.12	-.06	.22	.42 ***
B. DEVELOPING Ss:	.13	.37 ***	-.05	-.14	-.18	.00	.35 ***
Males.	.28 *	.25	-.21	-.26	-.06	-.29 *	.35 *
Females.	-.06	.51 **	.04	-.04	-.36 *	.40 *	.37 *
C. FORECLOSED Ss:	.14	.55 ***	.16	-.02	.01	-.04	.13
Males.	.25	.49 **	.08	-.26	-.08	.04	-.09
Females.	.16	.54 **	.03	.11	.08	-.12	.44 *

* $p < .05$;

** $p < .01$;

*** $p < .001$.

The correlations between scores on these measures for each standard separately are presented in Appendix D-3, Table 3.

PNF I scores and Age: The correlation coefficients for the male subjects tend to be greater than for the female subjects and $r = .28$ for the Developing males reaches significance at the .05 level. The results resemble those obtained for EIS scores and age. Within standards the correlation (.44) for the Developing Std. 8 males is the greatest although it does not reach significance, and the correlation (-.45) for the Foreclosed Std. 8 males is also moderately high as was found for EIS scores and age.

PNF I scores and Academic Averages. These variables correlate significantly. For the large groups (Table 3.9) the only coefficient which does not reach significance is for the Developing male subjects ($r = .25$). This may be due to an age factor: academic average decreases markedly with age for this sample ($r = -.44$, $p < .01$). Within standards for the Developing subjects, the correlations are significant for all groups except the Std. 8 males and the Std. 6 females. (These groups have failed to conform to pattern consistently). Within the Foreclosed group all correlations reach significance except for the Std. 8s (males and females) and the Std. 10 females but the latter correlation is high ($r = .66$). None of the correlation coefficients are negative.

PNF I scores and Janis-Field scores: One would expect scores on the measure of self-esteem to be related to scores on the PNF I regardless of the hypothesized relationship between identity and self-esteem because it is generally held that the opinion of others greatly influences subjective self-esteem unless it is defensive. But the correlations between scores on these measures fail to correlate significantly in the expected direction for all groups of subjects except the Developing Std. 10s ($r = -.36$, $p < .05$). The correlations of the Foreclosed subjects tend to be positive, especially for the Std. 6s ($r = -.45$, $p < .05$) and Std. 8s. These latter positive correlations may be interpreted as evidence that the Foreclosed subjects tend to be defensive but the data is not clear-cut. In contrast, the correlations are in the expected direction (negative) for the Developing subjects except for the Std. 6 females and the Std. 8 males.

PNF I scores and Problems Scale scores: The correlation coefficients tend to be negative as expected but few reach significance. For the Std. 10 subjects the correlation of $-.35$ is significant at the .05 level, and within this group the correlation for the Developing Std. 10s is significant ($r = -.44$, $p < .05$) and the correlations for the Std. 10 males (Developing and Foreclosed) reach significance. The correlations for the Std. 6 girls and Std. 8 boys (Developing and Foreclosed) are not in the expected direction.

PNF I scores and scores on the F-Scale items: The results show that there is virtually no relationship between these measures except for the Developing females ($r = -.36$, $p < .05$). The correlation between EIS scores and F-Scale scores for this sample ($r = -.34$) was also significant. Within this sample the correlation between PNF I scores and F-Scale scores is $-.74$ of the Std. 6 females (Developing) which is significant at the .01 level. The coefficient for the Developing Std. 8 females is also high ($r = -.41$) but the coefficient for the Developing Std. 10 females is positive ($r = .59$) and the correlation for all the Std. 10 females ($r = .49$) is significant at the .05 level. None of the correlations between these measures reaches significance for the Foreclosed subjects.

PNF I scores and Value Judgements Scale scores: For the males the correlations between these measures tend to be negative but for the girls they tend to be positive. For the Developing sample these correlations reach significance: for the males $r = -.29$, $p < .05$, and for the girls $r = .40$, $p < .05$. The Foreclosed subjects tend to

get high scores on the Value Judgements Scale (mean = 10.4) and the pattern is not so clear but for the Std. 8 males (Foreclosed) $r = -.81$, $p < .01$.

Correlations with Age:

TABLE 3.10: Correlations between Age and scores on the other measures.

Sample.	Acad.	PNF I.	J.F.	P.S.	F-S.	VJS.	EIS.
A. TOTAL sample:	-.30***	.11	-.14	-.12	-.27***	-.34***	.15
Males.	-.32**	.20	-.12	-.13	-.24*	-.31**	.23*
Females.	-.23	.03	-.10	-.05	-.30*	-.39**	.02
B. DEVELOPING Ss.:	-.38***	.13	-.23*	-.28**	-.33**	-.38***	.14
Males.	-.44***	.28*	-.25	-.29*	-.30*	-.41**	.23
Females.	-.25	-.06	-.15	-.21	-.36*	-.24	-.01
C. FORECLOSED Ss.:	-.10	.14	-.08	.00	-.41**	-.30*	.19
Males.	.02	.25	.00	-.06	-.50**	-.08	.25
Females.	-.19	.16	-.05	.23	-.29	-.63**	.09

* $p < .05$; ** $p < .01$; *** $p < .001$.

We have already discussed the correlations between Age and EIS and PNF I scores. For both these measures scores tend to increase with age for the male subjects but the degree of relationship is small. The correlations between Age and Academic Averages are negative for all the above groups except the Foreclosed male subjects where there is very little relationship between these variables. The mean

Academic Average of the Foreclosed Std. 6 males = 48.6, the Std. 8 males = 46.0, and the Std. 10 males = 50.7. For all other groups Academic Average tends to decrease with age but correlations fail to reach significance for the Female subjects. Within standards (Appendix D-4, Table 1) there is very little relationship between Academic Average and Age except for the Std. 6 females ($r = .57$, $p < .01$) and the Developing Std. 6s ($r = .51$, $p < .05$).

Age and Janis-Field Scale scores: All the correlations in Table 3.10 tend to be negative as would be expected (i.e., self-esteem increases with age) but the only one which reaches significance is for the total Developing sample ($r = -.23$, $p < .05$). There is a greater degree of relationship between age and self-esteem for the Developing subjects than for the Foreclosed subjects and the relationship is also more marked for the Developing male subjects ($r = -.25$) than for the Developing Female subjects ($r = -.15$). Within standards the correlation coefficients tend to be small and none reach significance.

Age and Problems Scale scores: For the Developing subjects Problems Scale scores tend to decrease with age ($r = -.28$, $p < .01$) and the relationship is more marked for the male subjects ($r = -.29$, $p < .05$) than for the female subjects ($r = -.21$). For the Foreclosed subjects there is very little relationship between these variables. Thus the pattern is similar to that for Age and Janis-Field Scale scores. Within standards none of the correlations reach significance.

Age and F-Scale scores: For all groups of subjects in Table 3.10 the correlations between these variables is negative, and all except the Foreclosed females reach significance. Thus scores on the F-Scale items seem to be relative to age to a certain extent and this is apparent within the Foreclosed classification despite the fact that the subjects with Foreclosed identities obtain higher F-Scale scores than subjects in the other classifications. Within standards none of the correlation coefficients reach significance except for the Std. 6 males ($r = .37, p < .05$) where F-Scale scores tend to increase with age. Within this group the Foreclosed boys tend to be older (mean = 14.0) than the Developing boys (mean age = 13.5) which may account for this.

Age and the Value Judgements Scale scores: As for the F-Scale items, scores on this scale also tend to decrease with age. The correlation coefficients are significant for all groups in Table 3.10 except for the Developing females and the Foreclosed males. The mean scores for each standard tend to decrease more for the Developing males (9.3 to 7.4) than for the Developing females (10.2 to 9.0), while the reverse is true for the Foreclosed subjects: male means decrease from 11.1 (Std. 6s) to 10.7 (Std. 10s) and the female mean scores decrease from 11.6 (Std. 6s) to 9.7 (Std. 10s). Within standards the only correlation between these variables which reaches significance is for the Developing Std. 6 females ($r = .59, p < .05$).

The Janis-Field Feelings of Inadequacy Scale:

Sex differences: The two-way analysis of variance for sex and standard differences obtained a significant F value $(1/148) = 24.51$ for sex differences (see Appendix D-5, Table 1). The girls obtain consistently higher mean scores on this scale than the boys regardless of Identity Classification (see Appendix C-6, Table 3).

Standard differences: When the subjects are divided according to sex and standard the variance between standards is significant:
 $F(2/148) = 3.44$. A similar finding was obtained when the subjects are divided according to socio-economic status and standard:
 $F(2/145) = 4.27$ (Appendix D-5, Table 2). In both cases only the mean scores for the Std. 8 subjects are significantly difference from the mean scores for the Std. 10s (lower). In general the mean scores for the Std. 8s are slightly higher than the means for the Std. 6s. These results suggest that self-esteem tends to increase during late adolescence only.

Janis-Field scores and socio-economic status: The results of the analysis of variance found that there are no significant differences between the subjects with different socio-economic background:
 $F(2/145) = 1.75$. Nevertheless the subjects from an upper-middle class background (I) tend to obtain slightly lower mean scores than those from categories II and III.

Janis-Field scores and Academic Averages: One might expect that those who do well academically would have a higher self-esteem than those who do poorly. But these results indicate that there is very little

TABLE 3.11: Correlations between Janis-Field scores and scores on other measures.

Sample.	Age.	Acad.	PNF I.	P.S.	F.S.	VJS.	EIS.
A. TOTAL sample:	-.14	.14	.05	.54***	.17*	.17*	-.41***
Males.	-.12	.10	-.06	.48***	.14	.05	-.41***
Females.	-.10	.06	.00	.53***	.14	.19	-.46***
B. DEVELOPING Ss:	-.23*	.22*	-.05	.55***	.41***	.31**	-.49***
Males.	-.25	.24	-.21	.42**	.45***	.11	-.56***
Females.	-.15	.10	.04	.63***	.35*	.37*	-.48**
C. FORECLOSED Ss:	-.08	-.03	.16	.42**	.00	-.04	-.33*
Males.	.00	-.29	.08	.35	-.24	-.05	-.19
Females.	-.05	.01	.03	.47*	.17	-.03	-.40

* $p < .05$;

** $p < .01$;

*** $p < .001$.

relationship between these variables. For the Developing subjects the unexpected correlation ($r = .22$) reaches significance at the .05 level. It is possible that this positive relationship between Janis-Field scores and academic performance is due to an age factor because both decrease with age. When the effects of age are partialled out for the Developing Ss, the correlation between these variables is only .15 which is not significant.

Within standards (Appendix D-5, Table 3) there is virtually no relationship between these variables either and for the Developing Std. 8 males Janis-Field scores correlate positively with Academic Averages ($r = .58$, $p < .05$). The only expected negative correlation which

reaches significance is for the Foreclosed Std. 8 males ($r = -.74$, $p < .05$). Thus there appears to be no general relationship between Janis-Field scores and academic performance.

Janis-Field scores and Problems scores: The correlation for the total sample is .54 which is significant at beyond the .001 level. Scores on these two measures are closely related on the whole but more so for the Developing Ss than for the Foreclosed Ss, and more so for the female subjects than for the male subjects. Within standards, the only groups for which the correlations are low are the Developing Std. 8 males (.01) and the Foreclosed Std. 10 males (-.15).

Janis-Field scores and F-Scale scores: All the correlations are positive except for the Foreclosed males ($r = -.24$). For the Developing subjects the correlations tend to be high. Even when the effects of age are partialled out for the total Developing sample the correlation obtained ($r = .36$) is significant at the .001 level. Within standards the correlations for the Developing subjects tend to be positive and reach significance at the .05 level for the Std. 8s ($r = .44$) and Std. 10s ($r = .41$). The correlation for the Std. 6s tends to be low ($r = .19$). For the Foreclosed subjects none of the correlations are significant and they tend to be negative except for the Std. 10 females ($r = .57$). Thus for subjects who are developing an identity scores on the Janis-Field Feelings of Inadequacy Scale and F-Scale scores are positively related.

Janis-Field scores and Value Judgements Scale scores: On the whole the correlations are low although they reach significance for the total

sample ($r = .17$, $p < .05$), the total Developing sample ($r = .31$, $p < .01$) and for the Developing females ($r = .35$, $p < .05$). Once again age may be contributing to this relationship. Removing the effects of age for the total Developing sample reduces the correlation to .24 which is still significant at the .05 level. Within standards none of the correlations between scores on these measures reach significance although the correlations are quite high for the Developing Std. 6 females ($r = .46$) and Developing Std. 8 females ($r = .39$). There is no relationship between these variables for the Foreclosed subjects.

Problems Scale:

Sex differences: In the two-way analysis of variance of sex and standard mean differences (Appendix D-6, Table 1) the means for the males and females were found to differ significantly: $F(1/148) = 8.31$. The girls obtain consistently higher scores on this scale than the boys regardless of Identity Classification (see Appendix C-6, Table 4).

Standard differences: In both analyses of variance (Appendix D-6, Tables 1 and 2) the mean Problems scores for each standard were not found to differ significantly although the differences are in the expected direction. The correlations between Problems scores and age found that for the Developing subjects Problems scores do decrease with age ($r = -.28$, $p < .01$) but not for the Foreclosed subjects ($r = .00$).

Socio-economic differences: The two-way analysis of variance

(Appendix D-6, Table 2) found no significant differences:

$F(2/145) = 1.73$. Consistent with other findings the subjects from an upper-middle class background (I) obtain the lowest mean score (16.2) while subjects in category II obtain the ^{highest} ~~lowest~~ mean score (19.04). This tends to support the earlier suggestion that subjects in category I experience the least difficulty in establishing an identity while subjects in category II experience the most.

Problems Scale and Academic Average: There are no significant correlations between these measures, but for the Foreclosed subjects the correlations tend to be negative.

TABLE 3.12: Correlations between Problems Scale scores and scores on the other measures.

Sample.	Age.	Acad.	PNF I.	J-F.	F.S.	VJS.	EIS.
A. TOTAL sample:	-.12	.07	-.08	.54***	-.07	.05	-.43***
Males.	-.13	.02	-.15	.48***	-.10	-.03	-.43***
Females.	-.05	.05	-.12	.53***	-.08	.07	-.44***
B. DEVELOPING Ss:	-.28**	+.16	-.14	.55***	.29**	.31**	-.44***
Males.	-.29*	.13	-.26	.42**	.19	.27	-.49***
Females.	-.21	.10	-.04	.63***	.39*	.22	-.40*
C. FORECLOSED Ss:	.00	-.14	-.02	.42**	.16	-.10	-.37**
Males.	-.06	-.31	-.26	.35	.11	-.09	-.34
Females.	.23	-.04	.11	.47*	.25	-.10	-.40

* $p < .05$;

** $p < .01$;

*** $p < .001$.

The positive correlations for the Developing subjects may be due to the fact that both Problems scores and Academic Averages decrease with age for these subjects. The correlations for each standard are presented in Appendix D-6, Table 3.

Problems Scale and F-Scale: For the general samples there is practically no relation between these variables, but for the Developing subjects the correlation of .29 is significant at the .01 level. Again, age may be contributing to this relationship: with the effects of age partialled out the coefficient is .22 which is significant at the .05 level. The correlation for the Developing males is not significant. Within standards, the only coefficients of any magnitude for the Developing subjects are for Std. 6 females ($r = .44$) and the Std. 8 females ($r = .40$) but none reach significance. For the Foreclosed subjects the only coefficient which reaches significance is for the Std. 10 females ($r = .78, p < .05$).

Problems Scale and Value Judgements Scale: In general there is very little relationship between scores on these measures. But for the Developing subjects those who obtain high Problem scores also tend to obtain high VJS scores and vice versa. The correlation of .31 for the total Developing sample is significant at the .01 level but scores on both these measures tend to decrease with age. With the effects of age partialled out the correlation is reduced to .23 and this significant at the .05 level. Within standards none of the coefficients reach significance although they tend to be positive for the Developing subjects. For the Foreclosed subjects none of the correlations between Problems scores and VJS scores reach significance and they tend to be negative.

F-Scale items:

Sex differences: The male subjects tend to obtain slightly lower mean scores than the females but the analysis of variance found no significant differences: $F(1/148) = 1.44$ (Appendix D-7, Table 1). The difference in means is greatest for the Std. 10 subjects.

Standard differences: The means decrease steadily with age, and in both analyses of variance (Appendix D-7, Tables 1 and 2) the variance was found to be significant with the Std. 6 means significantly different from the Std. 10 means. The mean scores decrease more for the male subjects (from 42.6 to 35.7) than for the female subjects (44.9 to 39.2).

Socio-economic differences: There are virtually no differences between the F-Scale mean scores: $F(2/145) = 0.25$ (Appendix D-7, Table 2).

TABLE 3.13: Correlations between scores on the F-Scale items and scores on the other measures.

Sample.	Age.	Acad.	PNF I.	J-F.	P.S.	VJS.	EIS.
A.TOTAL	-.27***	.08	-.04	.17*	-.07	.36***	-.03
Males.	-.24*	.11	-.06	.14	-.10	.40***	.05
Females.	-.30*	-.02	-.06	.14	-.08	.25*	-.14
B.DEVELOPING:	-.33*	.09	-.18	.41***	.29**	.20	-.28**
Males.	-.30*	.22	-.06	.45***	.19	.18	-.24
Females.	-.36*	-.14	-.36*	.35*	.39*	.18	-.34*
C.FORECLOSED:	-.41**	.01	.01	.00	.16	.27	-.20
Males.	-.50**	-.14	-.08	-.24	.11	.30	-.13
Females.	-.29	.20	.08	.17	.25	.24	-.28

* $p < .05$;

** $p < .01$;

*** $p < .001$.

F-Scale items and Academic Average: On the whole there is very little relationship between these measures. The only correlation which reaches significance is for the Developing Std. 6 females ($r = -.55$, $p < .05$) and the correlation for the Developing Std. 8 females is also quite high ($r = -.40$). The correlations for each standard are presented in Appendix D-7, Table 3.

F-Scale items and Value Judgements Scale: For the total sample and for the total male sample scores on these measures are highly correlated. Subjects classified as Foreclosed obtain higher scores on both these measures than Developing subjects and the differences tend to be greater for male subjects. When the subjects are divided according to identity classification none of the correlations reach significance although they still tend to be positive for both Developing and Foreclosed subjects. Scores on both these measures decrease with age and when the effects of age are removed the correlation of .36 for the total sample is reduced to .30 which is still significant at the .001 level. For the total Developing sample, however, the correlation of .20 is reduced to .09 when age is partialled out.

Within standards, F-Scale and VJS correlate significantly for the Std. 6 ($r = .29$, $p < .05$) and Std. 10 subjects ($r = .56$, $p < .001$) but when the subjects are divided according to identity classification the correlations tend to be low and the only one which reaches significance is for the Foreclosed Std. 10 males ($r = .72$, $p < .05$).

Value Judgements Scale:

Sex differences: In each standard the girls obtain higher mean scores on this measure than the males and the differences were found to vary significantly: $F(1/148) = 6.14$ (Appendix D-8, Table 4). Thus the girls consider activities such as drinking, smoking and gambling to be wrong more often than the boys do.

Standard differences: The Std. 6s consistently obtain the highest mean scores on the VJS and the Std. 10s the lowest. In both analyses of variance the standard mean differences were found to vary significantly, and the means for the Std. 6s were found to be significantly different from the means for the Std. 8s and for the Std. 10s. The Std. 8 mean scores were not found to differ significantly from the Std. 10 mean scores. (See Appendix D-8, Tables 1 and 2).

Socio-economic differences: The analysis of variance found no significant variance in the mean scores for the three socio-economic categories: $F(2/145) = 2.84$ (Appendix D-8, Table 2).

The correlation coefficients for the Value Judgements Scale are presented in Appendix D-8, Table 3.

- (1) Scores on the VJS decrease with age during the adolescent period.
- (2) In general VJS scores correlate positively with F-Scale scores, but correlations do not reach significance not when the sample is divided according to identity classification.
- (3) VJS scores correlate negatively with PNF I scores for Developing male subjects and positively for Developing female subjects. A similar relationship exists between VJS scores and EIS scores for the Developing subjects but the correlations fail to reach significance.

- (4) VJS scores tend to correlate positively with Janis-Field scores for Developing female subjects but there is little correlation between these measures for Developing male subjects.
- (5) VJS scores and Problems scores correlate positively for the Developing subjects but the degree of correlation tends to be greater for the males.
- (6) On the whole VJS scores fail to correlate with Academic Averages.
- (7) For the Foreclosed subjects VJS scores only correlate significantly with age for the female subjects. Some coefficients reach significance for different school standard groups but there are no general trends in the data.

Academic Averages:

A two-way analysis of variance of School Standard and Socio-economic means was computed for Academic Averages (see Appendix D-9, Table 1).

Standard differences: The Column Means differ significantly:

$F(2/145) = 8.51$. The multiple comparisons test found that the Std. 6 mean (55.76) is significantly different from the Std. 8 mean (47.7) and from the Std. 10 mean (48.25).

Socio-economic differences: The Row Means were not found to differ significantly: $F(2/145) = .28$. In Std. 10 the category I mean = 49.6: category II mean = 48.31, and the category III mean = 46.86, but these differences are not likely to reach significance.

Correlations with Academic Averages: All the correlations are given in Appendix D-9, Table 2, and will be briefly summarized here:

- (1) Academic Averages tend to decrease with Age across standards but correlations fail to reach significance for the female subjects and Foreclosed subjects (there is no relationship between these variables for the Foreclosed males).
- (2) Academic Averages correlate consistently with PNF I scores (positive) but fail to reach significance for the Std. 8 males (Developing and Foreclosed) and Developing Std. 6 females.
- (3) Academic Averages and Janis Field scores fail to correlate significantly on the whole. The relationships tend to be positive for the Developing subjects (Std. 8 males significant) and negative for the Foreclosed subjects (Std. 8 males significant).
- (4) None of the correlations between Academic Averages and Problems Scale scores reach significance. Similarly with F-Scale scores.
- (5) In general VJS and EIS scores fail to correlate significantly with Academic Averages and there are no consistent trends in these correlations.

DISCUSSION:

The major findings will be summarized and an attempt will be made to integrate them. Firstly, the discussion will focus on the general relationships between the variables which have emerged in the correlational analysis, and on the contribution of these findings to the validity of the measuring instruments. Then the discussion will turn to more specific findings relating to age trends in the data, sex differences, socioeconomic differences, and Identity Classification differences in the correlations.

The measures which intercorrelate most consistently are the EIS, Janis-Field Scale and the Problems Scale. In general the correlations between scores on these measures are moderate (ranging from about .4 to .5) and the findings confirm our theoretical expectations concerning the relationship between identity, self-esteem and the number and degree of adolescent problems reported.

The Ego Identity Scale has been used as an operational definition of identity in this study. It was originally designed by Rasmussen (1961) to assess the outcome of the identity crisis (i.e., a sense of identity versus identity confusion) in late adolescence and most of the items are based on Erikson's description of the 'symptoms' of identity confusion. But both the nature of the instrument and the pilot study data suggested that this scale might not prove to be a suitable measure of identity development during the moratorium stage.

The low correlations between age and EIS scores tend to confirm this doubt although there are other factors which may have contributed to this finding: a possible decrease in scores with age for some subjects.

because identity confusion often only manifests itself in late adolescence; the possibility of marked individual differences in the rate of development; and the fact that the sample does not cover a wide enough age range (the ceiling is too low to yield a fair distribution of subjects in each stage of identity development).

But none of the above factors account for the fact that some young adolescents obtain relatively high scores on the EIS although their scores on other measures suggest that they are still in the moratorium stage of identity development. The basic problem in measuring identity concerns the fact that two dimensions are involved: the vertical (or hierarchical) progression through sequential stages of development and the horizontal psychosocial adjustment dimension implied in the identity versus identity confusion continuum.

Identity development is not a quantitative increase in something but a differentiation and resynthesis of parts. The individual who is psychosocially 'healthy' enters adolescence with a sense of identity. His subsequent development may or may not involve becoming confused in varying degrees. According to Erikson most adolescents manage to develop their identities without becoming confused and the data of this study and of others (Douvan & Adelson, 1966; Offer et al, 1970) support this. For those who do become confused their confusion may either decrease or increase with age. A small minority probably begin their adolescence in confusion and they may remain confused, become less or more confused. Thus one would not expect to find age related changes along the horizontal identity versus identity confusion dimension in a cross-sectional study. A longitudinal study would be required to plot this kind of development.

Therefore, if the Ego Identity Scale is only measuring the identity versus identity confusion dimension (i.e., the horizontal adjustment continuum) one would not expect to obtain correlations with age in this study, and one would expect those adolescents who are developing their identities without becoming confused to obtain relatively high scores on the EIS. The results tend to support this interpretation of EIS scores. Firstly, the Identity Classification analysis of variance results suggest that the EIS discriminates best between those subjects who are experiencing some identity confusion (Moratorium→Confusion Ss) and those who are not (the other four categories). Even though the subjects who seem to be consolidating their identities (Moratorium→Achievement) obtain a significantly higher mean score than those who are developing their identities without confusion (Moratorium), both groups of subjects obtain quite a wide range of scores and there is a considerable amount of overlapping. Figure 2.1 (p. 114) shows that the Moratorium Ss obtain a relatively high EIS mean (in contrast to their mean scores on the Problems Scale and Janis-Field Scale) while the Moratorium→Confusion Ss obtain a very low EIS mean. The EIS does not differentiate the Foreclosed Ss (who differ in developmental status) from the Moratorium→Achievement or Moratorium Ss either. The Foreclosed Ss also obtain a wide range of scores (but very few low scores, i.e., below 40) which fits in with a psychosocial adjustment interpretation.

The second line of evidence comes from the correlational analysis. The Problems Scale and Janis-Field Scale scores do correlate significantly with age for the Developing Ss and therefore seem to be related to vertical development to a certain extent (although scores on these measures would also be related to the adjustment

dimension). The finding that EIS scores correlate better with Janis-Field and Problems Scale scores for the late adolescents (correlation coefficients are greater than .60 for the Developing Std. 10s) than for the younger subjects can be interpreted as further evidence that the EIS is not a good measure of identity development (in late adolescence subjects who obtain high EIS scores are more likely to have established an identity).

The Janis-Field Feelings of Inadequacy Scale was designed for use with junior high school pupils and has been used as a measure of self-esteem. According to the authors the scale reflects anxiety in social situations, self-consciousness and feelings of worthlessness. The item analysis of the pilot study data found that the items which reflect anxiety or concern about the opinion of others (concerning oneself) and about getting along with other people (anxiety in social situations) tended to discriminate best between high and low scorers.

In general, scores on the Janis-Field correlate best with Problems Scale scores and with EIS scores. But Janis-Field scores do not correlate significantly with PNF I scores except for the Developing Std. 10s ($r = -.36$, $p < .05$) nor with Academic Averages. This suggests that in adolescence self-esteem, as defined by Janis-Field Scale responses, is more closely related to personality development than to the evaluation of self by peers (reflected in the PNF I) and to academic performance.

Hamilton (1969) found that in a sample of university male students Janis-Field scores did not correlate very much with self/ideal-self discrepancy scores ($r = .20$, $p > .05$) which is a common measure of self-esteem, nor with a peer nomination measure of self-esteem ($r = .23$, $p < .05$). But he found that Janis-Field scores correlated significantly with the CPI sub-scales which tap Social Presence and Self-Acceptance ($r = -.67$) and Dominance ($r = -.52$), and with the Leary Interpersonal Check-list Dominance-Submission sub-scale ($r = -.62$). These three measures were highly inter-correlated. He also found that Janis-Field scores correlated significantly with the Rokeach Dogmatism Scale ($r = .39$), and in this study Janis-Field scores correlate significantly with F-Scale scores for the Developing Ss ($r = .41$).

At face value the 15 items of the Janis-Field which tap anxiety in social situations and self-consciousness seem to reflect the 'Self-certainty vs. Self-consciousness' dimension of the identity conflict. This dimension is more specifically related to the development of autonomy during adolescence and this may account for the findings concerning the relationship between Janis-Field scores and measures of dominance-submission, dogmatism and authoritarian attitudes, and also with measures related to identity vs. identity confusion. It is not being suggested, however, that the Janis-Field Scale is not a valid measure of self-esteem. 'Self-certainty' and self-esteem are probably basically the same.

Self-esteem is a complex construct which is difficult to measure because conscious self-evaluation is likely to be distorted - defensive self-esteem (Coopersmith, 1959). Many of the items of

Hamilton (1969) found that in a sample of university male students Janis-Field scores did not correlate very much with self/ideal-self discrepancy scores ($r = .20$, $p > .05$) which is a common measure of self-esteem, nor with a peer nomination measure of self-esteem ($r = .23$, $p < .05$). But he found that Janis-Field scores correlated significantly with the CPI sub-scales which tap Social Presence and Self-Acceptance ($r = -.67$) and Dominance ($r = -.52$), and with the Leary Interpersonal Check-list Dominance-Submission sub-scale ($r = -.62$). These three measures were highly inter-correlated. He also found that Janis-Field scores correlated significantly with the Rokeach Dogmatism Scale ($r = .39$), and in this study Janis-Field scores correlate significantly with F-Scale scores for the Developing Ss ($r = .41$).

At face value the 15 items of the Janis-Field which tap anxiety in social situations and self-consciousness seem to reflect the 'Self-certainty vs. Self-consciousness' dimension of the identity conflict. This dimension is more specifically related to the development of autonomy during adolescence and this may account for the findings concerning the relationship between Janis-Field scores and measures of dominance-submission, dogmatism and authoritarian attitudes, and also with measures related to identity vs. identity confusion. It is not being suggested, however, that the Janis-Field Scale is not a valid measure of self-esteem. 'Self-certainty' and self-esteem are probably basically the same.

Self-esteem is a complex construct which is difficult to measure because conscious self-evaluation is likely to be distorted - defensive self-esteem (Coopersmith, 1959). Many of the items of

the Janis-Field tap behavioural manifestations and they are phrased in such a way that they do not have a negative connotation. Thus most of the items (except the seven 'feelings of worthlessness' items) are unlikely to arouse defensiveness which may account for the finding that very few of the Foreclosed Ss obtain low Janis-Field scores (high self-esteem). Those Foreclosed Ss who do obtain very low Janis-Field scores tend to obtain very low PNF I scores and they may be over-compensating - the variant of low self-esteem which Gold & Douvan (1969) call "a swaggering verbal self-confidence" (p. 344). The Janis-Field Scale is probably not a very good measure of conscious self-evaluation and this may explain the low correlation found between it and the self/ideal-self discrepancy measure of self-esteem by Hamilton (1969).

The Problems Scale provides an index of the number and degree of adolescent problems which are experienced. It is a crude instrument but scores correlate significantly with EIS and Janis-Field scores, and with F-scale Scores for the Developing Ss. Problems Scale scores differentiate very well between the Identity Classifications:

$F(4/149) = 50.38$. The Pre-Moratorium, Moratorium→Achievement and Foreclosed Ss obtain low scores, the Moratorium Ss obtain moderately high scores and the Moratorium→Confusion Ss get high scores.

Problems Scale scores also decrease significantly with age

($r = -.28, p. < .01$). These findings all indicate that adolescent problems are closely related to the development of identity and that those who experience difficulties in forming an identity (the Moratorium→Confusion Ss) experience the most problems. The item analysis of the Problems Scale in section 6 will show which specific problem areas are involved in identity formation.

The Peer Nomination Form was designed for this study and it has no proven validity. The positive items of Sub-scale I ask for nominations of those who are respected by their peers (item 1), those who "seem to know what they want and where they are going" (item 5), those who are calm and relaxed (item 7), and those who are competent and self-confident (item 13). The negative items require nominations of those who are not respected (item 2), those who are unhappy (item 4), 'mixed-up' (item 6), nervous and on edge (item 8), and those who are easily angered and are quarrelsome (item 12). These items were grouped together because they were found to intercorrelate (pilot study data). At face value it seemed that identity vs. identity confusion might be the common factor but the data was not suitable for a factor analysis.

If the PNF I is a valid measure of identity vs. identity confusion then it should correlate highly (positively) with EIS scores, and significantly (negatively) with Janis-Field and Problems Scale scores. But this was not found to be the case: PNF I scores and EIS scores do correlate significantly on the whole but the correlation coefficients were not high enough to conclude that these scales are measuring the same construct. And PNF I scores do not correlate significantly with Janis-Field and Problems Scale scores except for the Developing Std. 10 Ss. Neither do PNF I scores differentiate significantly between the Identity Classifications although the mean scores are in the expected direction.

PNF I scores do correlate significantly with Academic Averages, a variable which does not appear to be related to identity formation (it fails to correlate significantly with EIS, Janis-Field or Problems

Scale scores and it does not differentiate between the Identity Classifications). The available evidence, therefore, suggests that the PNF I is not a valid measure of identity. A subjective impression gained from assessing individual subjects (in order to make the identity classifications) is that subjects who obtain high PNF I scores are highly regarded by their peers (but not necessarily popular) while those who obtain low scores seem to be regarded with contempt. The reasons probably differ in individual cases but academic achievement seems to be important. Almost all the subjects who obtain the highest marks in their classes obtain high PNF I scores (see Appendix C-4). But the findings also suggest that PNF I scores are ~~also~~ related to psychosocial adjustment along the identity versus identity confusion continuum to a certain extent.

The peer nomination technique has not received adequate investigation and there are possible method variables which may influence scores such as bias towards nominating one's own sex, influence of sexual stereotypes, and reluctance to nominate peers on negative items. These factors will be discussed in section 5. Another possibility is that nominations on some items may be relative to the pool of subjects available for nomination. For example, on item 5 (Which people seem to know what they want and where they are going?) a Std. 6. will probably nominate those individuals who seem to fit the item description best in contrast to the remainder of the class.

The F-scale items used in this study reflect 'authoritarian submission' and 'conventionalism' according to Adorno et al (1950) and this scale was administered in order to identify subjects with foreclosed identities (Marcia, 1966, 1967). F-Scale scores have been found to

decrease significantly with age for the Developing Ss and for the Foreclosed Ss (despite the fact that the range of scores of the Foreclosed Ss is restricted - high scores). For the Developing Ss F-Scale scores correlate significantly with EIS scores ($r = -.28$, $p < .01$), Problems Scale scores ($r = .29$, $p < .01$) and with Janis-Field scores ($r = .41$, $p < .001$), and these correlations remain significant when the effects of age are partialled out.

Thus scores on these F-Scale items seem to be related to identity formation during the adolescent period. One would not expect to find this if high F-Scale scores reflect an underlying 'authoritarian personality' as defined in psychoanalytic literature because this is supposed to stem from disturbances in early childhood. Therefore, by adolescence one would have expected scores to have become relatively fixed.

The items reflect 'authoritarian' attitudes and middle class values and these attitudes and values may be normative in an 'authoritarian society'. Orpen has found that attitudes reflecting racial prejudice are not closely related to authoritarian personality measures (full F-Scale, 1971a, Rokeach Dogmatism Scale and the Smith-Rosen Worldmindedness Scale, 1971d) and that prejudice is a function of adjustment to South African norms (1971b) in English-speaking South African white late adolescents. He concludes that in a society where racial prejudice is socially accepted it does not necessarily reflect an underlying 'authoritarian personality' structure.

Similarly, agreement with the attitudes and values expressed in the F-Scale items used in this study may reflect conformity to parental and social values rather than an 'authoritarian personality'. This interpretation offers a much more plausible explanation for the findings in this study than an authoritarian personality theory without invalidating the hypothesis that individuals who foreclose their identities would obtain high scores on these F-Scale items - individuals who foreclose their identities are by definition submissive and/or conformist and therefore in an 'authoritarian society' they would be expected to endorse 'authoritarian' attitudes and values.

But the 'normal' young pre-adolescent and early adolescent is also conformist (cf. Loevinger's conformist stage) because he has not yet developed sufficient independence to question the accepted social values. The development of this independence and the questioning of parental and social values is a function of the development of an autonomous sense of identity during adolescence. Thus, in an 'authoritarian society' one would expect many 'normal' young adolescents to obtain relatively high scores on these F-Scale items, and one would expect these scores to decrease with age (because 'authoritarian' attitudes and values are incompatible with an autonomous identity).

This interpretation of the F-Scale items suggests that scores will be closely related to the development of autonomy (self-certainty vs. self-consciousness) which would explain the moderate correlation between F-Scale scores and Janis-Field scores obtained for the Developing Ss.

The Value Judgements Scale (VJS) measures attitudes towards activities which are often considered in a moral light (drinking, smoking, lying, stealing, gambling and drug-taking). High scores are obtained by those who feel that most of these activities are wrong while lower scores reflect a more permissive attitude. No close relationships have been found between VJS scores and scores on any of the other measures in this study although VJS scores do correlate significantly with Janis-Field and Problems Scale scores for the Developing Ss ($r = .31$, $p < .01$ in both cases). But the degree of correlation with Janis-Field scores is not consistent across sex and age groups within this sample. VJS and F-Scale scores also correlate significantly for the total sample ($r = .36$, $p < .01$) but this seems to be due to the fact that the Foreclosed Ss obtain higher mean scores on both these scales than the Developing subjects and scores on both measures decrease with age. When the subjects are divided according to Identity Classification, the correlations between F-Scale and VJS scores fail to reach significance. Thus the VJS seems to be measuring attitudes which are relatively independent from the other variables in this study although these attitudes may be related to identity development in some way. The item-analysis of the VJS in section 8 should throw some more light on this.

Age Trends: The low correlations between age and EIS scores will not be discussed further here. Although no significant variance has been found between school standards in Problems Scale scores, these scores do decrease significantly with age for the subjects who are developing an identity ($r = -.28$, $p < .01$). Decreases in the number of problems with age during the adolescent period has also been found in other studies (Morgan, 1969). Janis-Field scores also decrease

significantly with age for the Developing Ss ($r = -.23$, $p < .05$) but the age trends in the Problems Scale and Janis-Field Scale scores are more marked for the Developing males than for the females.

An interesting finding concerns the analysis of variance in school standard differences in Janis-Field scores: the Std. 8s obtain the highest mean score (30.0) and it differs significantly from the Std. 10 mean (25.1) which is the lowest. The Std. 6 mean (28.6) does not differ significantly from either. These findings suggest that self-esteem and self-certainty do not increase gradually throughout adolescence but that the increase only takes place in late adolescence. This is in line with Erikson's contention that self-esteem increases when the identity crisis has been resolved.

Scores on the F-Scale items decrease from 39.9 (Std. 6 mean) to 32.5 (Std. 10 mean) for the Developing Ss, and from 50.5 to 45.2 for the Foreclosed Ss. For both groups the correlations with age are significant at the .01 level ($-.33$ and $-.41$ respectively), and the overall mean score for the Std. 10s (37.5) differs significantly from the Std. 6 mean (43.8). Similarly, scores on the VJS decrease significantly with age for the Developing Ss ($r = -.38$, $p < .001$) and for the Foreclosed Ss ($r = -.30$, $p < .05$). The Std. 6 mean (10.4) differs significantly from the Std. 8 mean (9.6) and from the Std. 10 mean (8.8). Scores on these two scales show the closest relationship with age and it is interesting to note that they are both concerned with attitudes and values. The Foreclosed Ss obtain high scores on both scales but the reason why their scores decrease with age is not clear.

The only other general age trend is in Academic Averages which decrease significantly with age for the total sample ($r = -.30, p < .001$) and with school standard: the Std. 6. mean (55.8%) differs significantly from the Std. 8. mean (47.7%) and from the Std. 10 mean (48.2%). This is a common phenomenon in the school system and does not necessarily reflect genuine differences in academic ability although the Std. 8. mean is slightly lower than expected. The mean I.Q. scores of the Std. 6s (113.2) and Std. 10s (111.0) are similar but the Std. 8. mean is slightly lower (107.9). This means that the three age groups are not quite equal in terms of academic ability but academic achievement does not seem to be related to identity development and so this inequality probably does not influence the results very much.

PNF I scores are not closely related to age although the correlation for the Developing Males ($r = .28$) reaches significance at the .05 level.

These findings show that there are developmental trends in the data and it is important that most of the significant correlations with age are for the Developing subjects. One would not expect age trends in the data for the Foreclosed Ss because their identity development has been consolidated prematurely. But the most important finding from the theoretical point of view (assuming that the Identity Classifications are valid) is that the Moratorium→Achievement Ss have the highest mean age (17.5 years) which is significantly different from the mean ages of each of the other categories. And the greatest proportion of subjects in this category (83%) are in Std. 10 and none are in Std. 6.

Roughly equal proportions in each school standard (between 30 and 36 per cent) are classified as Foreclosed as expected. Most of the Pre-Moratorium Ss are in Std. 6 (mean age = 14.7 years) but it is possible that some of the subjects in this group are misclassified. But the age period covered in this study (13 to 18 years) does not adequately cover the period of identity formation. Only two subjects seem to have established an identity besides the Foreclosed Ss and a relatively small proportion seem to be consolidating their identities.

It has already been pointed out that school leaving does not necessarily mean the end of the social moratorium for many adolescents - the boys all have another year doing military service and about 30% of the Std. 10 Ss in this study intend to go to university. Of course, the moratorium period can be extended (by those who need to) in many other ways as well. The age distribution in the Identity Classifications tends to confirm the prediction that there are considerable individual differences in the rate of identity development during adolescence.

Sex differences: The analysis of variance computations found no significant sex differences in the EIS and F-Scale scores:

$F(1/148) = .06$ and 1.44 respectively. But on the Janis-Field and Problems Scale the girls obtain consistently higher mean scores than the boys in each school standard, and the scores were found to vary significantly: $F(1/148) = 24.51$ and 8.31 respectively. These differences are difficult to account for because there is no reason to believe that the girls experience greater difficulties in establishing an identity than boys do.

Studies using the Mooney Problem Check-list have also found that girls tend to check more problems than boys (Morgan, 1969). Either the Problems Scale items are slightly more appropriate for girls or the girls are more willing to admit problems than the boys: it may be more acceptable for girls to admit problems and therefore less damaging to self-esteem. The item analysis in section 6 may throw more light on this.

The difference in Janis-Field mean scores is more marked (32.1 versus 24.0) and the girls' scores also vary more than the boys (S.D. = 11.1 versus 8.2). Douvan & Adelson (1966) have found that adolescent girls are more concerned about interpersonal relations than their male peers and many of the Janis-Field items reflect interpersonal issues. Thus it could be that the girls' scores are slightly inflated because of this. But this also raises the possibility that the Janis-Field Scale may have a different meaning for girls than for boys but by and large the Janis-Field scores correlate with other measures to the same degree for both sexes and they differentiate between the Identity Classifications in the same way for both sexes. Further research is required to clarify these issues.

On the PNF I the girls obtain a significantly higher mean score (109.7) than the boys (103.4): $F(1/148) = 5.87$. This difference is particularly marked for the Std. 8s (112.9 versus 99.4) and almost negligible for the Std. 10 Ss (108.6 versus 109.2). PNF I scores correlate significantly with Academic Averages, and in all standards the girls obtain higher mean Academic Averages with the biggest difference in Std. 8: 50.8% versus 45.4% (see Appendix C-2, Table 4).

It has also been found that in the three Std. 8. classes only one boy manages to secure a place in the first three positions. Nevertheless, it is unlikely that these factors account for all the variance in the PNF I data.

When the subjects are divided according to Identity Classification the sex difference in PNF I scores shows up mainly for the Moratorium→ Confusion Ss and for the Foreclosed Ss:

	<u>M→Ach.</u>	<u>Mora</u>	<u>M→Con.</u>	<u>Fore.</u>
Males:	112.7	106.1	92.2	101.5
Females:	112.8	107.3	102.7	114.4

Among the Foreclosed Ss the difference is greatest for the Std. 8s (28 points) and least for the Std. 10s (4.2 points) - See Appendix C-6, Table 2. A very tentative suggestion is that boys who show signs of identity confusion and dependence are treated with greater contempt and are regarded as more maladjusted by their peers than girls. But these results should be interpreted with caution and no generalizations can be made because there appear to be many factors which influence PNF I scores. For example, the Foreclosed Std. 10 males obtain a reasonably high PNF I score (112.2) but five out of the ten subjects in this group are school prefects and they also obtain a relatively high mean Academic Average (50.7%).

Nevertheless, the very high PNF I scores obtained by the Foreclosed Std. 8 and 10 girls (120.5 and 116.4 respectively) cannot be ignored. Marcia & Friedman (1970) have hypothesized that identity foreclosure is more 'adaptive' for girls than the establishment of an autonomous

identity because conformity, dependence and the acceptance of social values is expected of women and socially approved. The very high PNF I mean scores obtained by the older Foreclosed girls seems to support this (in Std. 6 the difference in value orientations between the Foreclosed and Moratorium Ss would not be so marked).

Another interesting sex difference is in the correlations between PNF I scores and VJS scores for the Developing Ss: for the males the correlation is negative ($r = -.29$, $p < .05$) but for the females it is positive ($r = .40$, $p < .05$). Thus the Developing boys who are more highly regarded by their peers tend to be more permissive towards activities such as drinking, smoking and gambling while the more highly regarded girls tend to be less permissive towards such activities. The girls also obtained a significantly higher VJS mean score than the boys: $F(1/148) = 6.14$. This supports the findings of Wright & Cox (1969).

Age trends in the EIS, PNF I, Janis-Field and Problems Scale scores tend to be more marked for the boys than for the girls. It is difficult to assess whether this is significant or not. The upper age limit of the boys is higher (19 years, 7 months) than that of the girls (18 years, 4 months) and more boys than girls are classified as Moratorium → Achievement.

Socioeconomic differences: No significant differences have been found between the socioeconomic categories for any of the variables discussed in the previous section. Nevertheless, on the EIS, Janis-Field, Problems Scale and PNF I a consistent pattern does emerge in the data. The mean scores are as follows:

	<u>EIS.</u>	<u>J-F.</u>	<u>P.S.</u>	<u>PNF I.</u>
S-E I:	46.9	25.1	16.2	110.1
S-E II:	43.5	28.5	19.0	103.7
S-E III:	44.7	28.1	17.6	104.5
F values (2/145):	(1.86)	(1.75)	(1.73)	(2.24)

The category I (Upper-middle class) Ss obtain 'better' mean scores on these measures than category II and III Ss while category II Ss obtain slightly 'worse' mean scores than category III (lower-middle class) Ss. The Identity Classification data suggests that subjects from an upper-middle class background (I) tend to experience the least difficulty in establishing an identity while category II subjects are most likely to experience problems. Although these results support this, the differences are small and may be due to chance factors.

Another trend observed in the data is that the differences noted above tend to be more marked for the Std. 10s than for the younger subjects. Thus it could be hypothesized that the influence of socio-economic background on identity development increases with age. On the PNF I the category I Ss obtain the highest mean scores in each school standard which suggests that socio-economic status may be another factor which influences peer nominations on this measure.

The socioeconomic differences in F-Scale scores, VJS scores and in Academic Averages are almost negligible: $F(2/145) = 0.25, 2.84$ and 0.28 respectively. The absence of significant differences in this data is not really unexpected because the sample is only representative of the middle class. A wider range of socioeconomic status may yield more interesting results.

Identity Classification differences: One would expect the correlations between scores on those variables which are related to identity formation to be higher for the subjects who are developing an identity than for the subjects who have foreclosed their identity development. The inter-correlation matrices for the Total sample, the Developing sample and the Foreclosed sample may be referred to in Appendix D-10.

As expected, the EIS, Janis-Field and Problems Scales scores inter-correlate better for the Developing Ss than for the Foreclosed Ss. But scores on these scales also intercorrelate significantly for the Foreclosed Ss despite the fact that Problems Scale scores tend to be low for this group. One would expect quite a wide range of psychosocial adjustment within the Foreclosed sample and this probably accounts for the common variance in these scores. None of these variables correlate significantly with age in the Foreclosed sample and so variance cannot be attributed to development, but in the Developing sample Janis-Field and Problems Scale scores decrease significantly with age.

The Foreclosed Ss obtain significantly higher scores on the F-Scale (mean = 48.0) than subjects in the other Identity Classifications and F-Scale scores fail to correlate with any of the variables discussed (except age). But for the Developing Ss F-Scale scores correlate significantly with EIS, Problems Scale, and Janis-Field scores as well as with age. The Moratorium→Achievement Ss obtain the lowest F-Scale mean score (31.6) which is significantly different from that of the Moratorium→Confusion Ss (40.3).

The VJS scores only correlate significantly with age for the Fore-closed Ss but this group tend to obtain high VJS scores. For the Developing sample VJS scores correlate significantly with age, Janis-Field and Problems Scale scores. This suggests that there might be some relationship between scores on VJS and identity development but the findings are not clear-cut.

PNF I scores tend to correlate more consistently with EIS scores for the Developing sample, and the PNF I correlations with Janis-Field and Problems Scale scores tend to be in the expected direction (negative) but only reach significance for the Developing Std. 10s.

On the whole, the pattern of correlations which emerges for the Developing Ss holds for most of the sex and standard sub-groups within this sample. The two groups which do not conform to this pattern are the Std. 6 girls and the Std. 8. boys but these groups are too small ($N = 13$ and 16 respectively) to warrant any serious consideration of the findings. There are no significant findings for these groups which contradict any of the general findings (the intercorrelation matrices are given in Appendix D-10, Tables 4 & 5).

Summary: The EIS, Janis-Field, Problems Scale and F-Scale scores seem to be related to identity formation in adolescence but the results suggest that the Ego Identity Scale is not a very good measure of identity development (along the hierarchical dimension). Self-esteem, as measured by the Janis-Field Scale, seems to be related to the 'Self-certainty vs. Self-consciousness' dimension of the identity conflict and it increases most markedly in late adolescence.

The number and degree of adolescent problems reported decrease with age and differentiate clearly between the Moratorium→Achievement, Moratorium and Moratorium→Confusion Ss. Scores on this measure also differentiate between the Foreclosed Ss (low scores) and the Moratorium Ss, but the scale which differentiates the Foreclosed Ss from those who are developing an identity most clearly is the F-Scale items. Scores on this scale also discriminate significantly between the Moratorium→Achievement Ss (low scores) and the Moratorium→Confusion Ss and decrease with age. The findings suggest that responses to the F-Scale items are related to the development of autonomy.

The Value Judgements Scale also seems to differentiate between the Foreclosed and Developing Ss to a certain extent, and the findings suggest that scores on this scale are, perhaps indirectly, related to identity development. The PNF I scores appear to reflect 'Social respect vs. Social contempt' and are consistently related to academic performance. But scores on this scale are also related to psychosocial adjustment to a certain extent and to identity development in a complex way. (The Foreclosed girls tend to obtain high scores).

The data also suggests that socio-economic status may influence peer nominations on this measure. Academic performance does not appear to be related to identity formation in this sample.

Developmental trends (as a function of age) in the data are masked by the fact that almost all the measures are related to psychosocial adjustment along the identity vs. identity confusion continuum, and adolescent development along this continuum can only be successfully studied in a longitudinal research design. Unfortunately, no

instrument was included in the test battery to specifically measure degree of identity development but the Identity Classifications go some way towards identifying stages of development.

The Identity Classification data suggests that many adolescents in this population do not finally establish their identities before they leave high school, and that there are marked individual differences in the rate of identity development during the adolescent period.

The findings also show that there are no marked sex differences in the basic processes (as identified in this study) of identity development, and no socio-economic differences within the middle class. But there is a trend which suggests that adolescents from an upper-middle class background (I) tend to experience fewer difficulties while subjects from category II are most likely to experience problems in establishing their identities, and that the influence of socioeconomic background increases with age.

The sample consists of three different age groups which correspond roughly with the three major adolescent phases - early, middle and late - and it was thought that differences might emerge in the interactions between variables in these different phases. Although differences do occur in the correlations, one hesitates to generalize from these findings because the differences are not very marked nor very consistent and the groups involved are rather small.

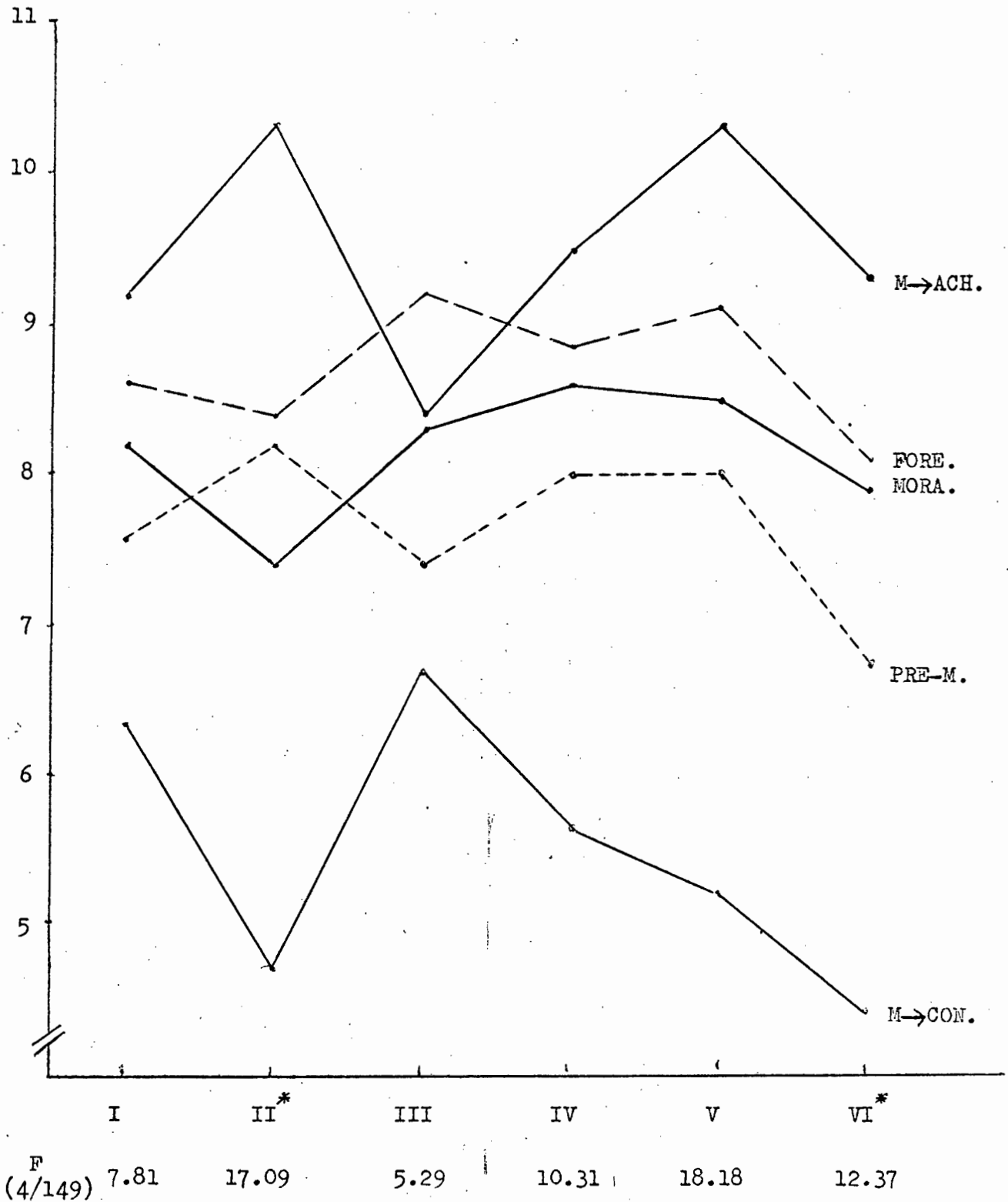
4. Analysis of the EIS Sub-scales.

Sex and School Standard differences: A two-way analysis of variance of sex and standard differences in the mean scores for each of the EIS sub-scales was conducted (Appendix E-1) using the Scheffé approximate method for unequal groups. The Row Means (sex differences) were not found to differ significantly for any of the sub-scales. Thus the adolescent boys in this sample do not obtain significantly different mean scores from the girls on the Ego Identity Scale as a whole nor on any part of it.

It was found that the EIS (total) mean scores increase with school standard for the boys but for the girls the Std. 8s obtained the lowest mean score and the Std. 10s the highest. This pattern holds for the mean scores of all the sub-scales except I and III. But the standard mean scores (Column Means) were only found to vary significantly for sub-scale II - $F(2/148) = 6.83$ - and sub-scale VI - $F(2/148) = 7.04$. For both these sub-scales the Std. 10 mean scores are significantly different (higher) from the means for the Std. 6s and the Std. 8s.

Identity Classification differences: The mean scores for each Identity Classification on each EIS sub-scale are presented graphically in Figure 2.2. A one-way analysis of variance of differences between the Identity Classification mean scores for each EIS sub-scale was conducted (Appendix E-2) and the F values are given at the bottom of Figure 2.2.

FIGURE 2.2: EIS Sub-scale Mean Scores for each Identity Classification.



* The mean scores for sub-scales II and VI have been adjusted.

The mean scores of the Identity Classification groups were found to vary significantly for all the sub-scales and the significant differences are summarized in the following tabulation:

M→Ach.	vs.	Mora.:	II,			V.	
M→Ach.	vs.	M→Con.:	I, II,		IV,	V,	VI.
M→Ach.	vs.	Fore.:	II.				
M→Ach.	vs.	Pre-M.:	None.*				
Mora.	vs.	M→Con.:	I, II,		IV,	V,	VI.
Mora.	vs.	Fore:	None.				
Mora.	vs.	Pre-M.:	None.				
M→Con.	vs.	Fore.:	I, II,	III,	IV,	V,	VI.
M→Con.	vs.	Pre-M.	II,			V.	
Fore.	vs.	Pre-M.:	None.				

Sub-scales II and V differentiate best between the Identity Classifications and it is on these sub-scales that the Moratorium→Achievement Ss obtain their highest mean scores (see Fig 2.2).

In contrast, on sub-scale II, the Foreclosed Ss, Moratorium Ss and Moratorium→Confusion Ss obtain mean scores which are relatively lower than most of their other mean scores. Sub-scale II is the only sub-scale which differentiates significantly between the Moratorium→Achievement Ss and the Foreclosed Ss, and sub-scales II and V are the only sub-scales which differentiate significantly between the Moratorium→Achievement Ss and the Moratorium Ss.

The Pre-Moratorium Ss mean score for sub-scale II is high in relation to their other mean scores and it does not differ significantly from that of the Moratorium→Achievement Ss. There is considerable variation in the sub-scale II scores of the Pre-Moratorium Ss (S.D. = 2.5) and the raw data (Appendix C-4, Table 7)

* The Pre-Moratorium group is very small (N = 10) and therefore large differences are required to reach significance.

shows that it is mainly the older boys in this category who obtain high scores, and their classification as Pre-Moratorium was queried for this reason.

Other results which are of interest are the relatively lower mean scores on sub-scale VI for all the Identity Classifications (see Fig. 2.2); and the relatively high mean score of the Foreclosed Ss on sub-scale III. It is the only sub-scale on which the Foreclosed Ss obtain a higher mean than the Moratorium→Achievement Ss, and it differentiates least well between the Identity Classifications. On the whole, the sub-scales differentiate best between the Moratorium→Confusion Ss and subjects in the other categories. Although the means on sub-scales I and IV differ in the expected directions, they only differentiate (significantly) the Moratorium→Confusion Ss from the other classifications.

Correlations between EIS total scores and sub-scales scores: For the total sample, sex and standard sub-samples sub-scale V scores correlate best with total EIS scores (see Appendix E-3, Table 1) with the correlation coefficients ranging from .72 to .83, and sub-scale III scores tend to correlate least well with total scores (correlation coefficients range from .47 to .76). Nevertheless all the sub-scales correlate with total scores at beyond the .001 level of significance for all these groups. The correlation coefficients tend to be highest for the Std. 10 subjects and lowest for the Std. 8s.

When the subjects are divided according to identity classification (Appendix E-3, Table 2) the patterns of correlations differ. For the total Developing sample sub-scale V still correlates best ($r = .81$, $p < .001$) and sub-scale III least ($r = .60$, $p < .001$) with total EIS scores, but when this group is broken down (thus restricting the range of scores in each sample) it is sub-scale III scores which correlate best with total scores for the Moratorium→Achievement Ss ($r = .68$, $p < .01$) and the Moratorium Ss ($r = .70$, $p < .001$). It should be noted that within these two groups the scores on sub-scale III vary more than scores on the other sub-scales (standard deviations are given in Appendix E-3^{Table 3.}).

For the Moratorium→Achievement sample the only sub-scale which fails to correlate significantly with total scores is II ($r = .44$), but subjects in this group obtain high scores on this sub-scale (S.D. = 1.2). Similarly, most of this group obtain high scores on sub-scales V and VI and neither of these sub-scales correlate very highly with total scores (.47 and .52 respectively). For the Moratorium→Confusion sample sub-scales I ($r = .72$) and V ($r = .74$) correlate best with total scores and both coefficients reach the .001 level of significance. Sub-scales III ($r = .35$) and VI ($r = .31$) fail to correlate significantly with total scores for this group.

For the Foreclosed sample it is scores on sub-scale IV which are most highly correlated with total scores ($r = .77$, $p < .001$) and sub-scale II scores which correlate least ($r = .60$, $p < .001$). For the Pre-Moratorium sample the only correlations which reach significance are for sub-scales I ($r = .80$, $p < .01$) and III ($r = .65$, $p < .05$), and the lowest correlation coefficient is for sub-scale VI ($r = .30$).

Intercorrelations of sub-scale scores: Scores on the EIS sub-scales were intercorrelated for various groups of subjects, and the intercorrelation matrices are contained in Appendix E-4. This (rather than factor analysis) was done in order to test Rasmussen's findings of fairly distinctive patterns among inter-correlations of EIS sub-scale scores:

(1) The intercorrelation matrix for his Group (A) subjects (those rated as psychosocially effective by their peers and operationally defined as having established an ego identity) showed that for sub-scales I through V "the influence of a preceding crisis stage on a given stage is inversely proportional to the distance it is removed from the stage in question [i.e., the correlation coefficients increase as one moves down the vertical columns of the matrix]. However, this pattern does not hold uniformly for the effect of any given stage on the succeeding stages" i.e., along the horizontals of the matrix. (Rasmussen, 1964, p. 822).

(2) The intercorrelation matrix for his Group (B) subjects (those rated as minimally effective psychosocially and operationally defined as manifesting identity confusion) showed that sub-scale I scores correlated significantly with all other sub-scale scores except II. In pattern (I) sub-scale I scores failed to correlate significantly with any of the other sub-scale scores.

Pattern (I) is not evident in any of the intercorrelation matrices in this study (see Appendix E-4) but none of these groups is strictly comparable with Rasmussen's Group (A) - the Std. 10 sample is closest in age but it contains subjects manifesting some identity confusion, while the Moratorium→Achievement sample is closest in identity 'status' but Rasmussen's sample probably contained foreclosed identities as well.

The Moratorium→Confusion sample approximates Rasmussen's Group (B) except in age, and the matrix (Appendix E-4, Table 12) is similar to Rasmussen's pattern (2) insofar as sub-scale I scores correlate significantly with scores on III, IV and V. But the only other coefficient which reaches significance is for sub-scales II and VI while in Rasmussen's data nearly all the correlations reach significance.

The intercorrelation matrices obtained in this study will not be analysed in detail as there are few consistent patterns in the matrices or marked differences between the matrices for different groups of subjects. Some findings will be mentioned:

- (1) On the whole, the sub-scale scores intercorrelate positively but very few of the coefficients are greater than .60. Most of the correlations range from .20 to .50 with the majority being greater than .30. Exceptions to this are the intercorrelation matrices for the Std. 8 sample (Appendix E-4, Table 5) and the moratorium samples (Appendix E-4, Tables 9 through 12). In the moratorium samples the range of EIS scores is restricted and the correlation coefficients tend to be low.
- (2) In all the samples except those mentioned above sub-scale V scores correlate significantly with scores on each of the other sub-scales and the coefficients tend to be relatively high.
- (3) The only really consistent relationship which has emerged is between sub-scales II and VI. Scores on these sub-scales correlate significantly for all the samples except the Foreclosed ($r = .26$) and Pre-Moratorium ($r = .56$) groups. In general, these sub-scales correlate better with each other than with any of the other sub-scales and the correlation coefficients reach .61 ($p < .001$) for the Developing Ss, .55 ($p < .05$) for the Moratorium→Achievement Ss, and .50 ($p < .05$) for the Moratorium→Confusion Ss.
- (4) For the Foreclosed Ss sub-scale IV correlates most highly with all the other sub-scales except III (Appendix E-4, Table 8).

Discussion.

The correlations between EIS sub-scale scores and total scores are generally high in those samples which cover a wide range of EIS scores. This shows that the Ego Identity Scale has a considerable amount of internal consistency. But the sub-scale intercorrelations, although positive, are not very high which suggests that each sub-scale reflects a different aspect of the same overall dimension and that each aspect can vary somewhat independently from the other aspects.

Sub-scale scores tend to correlate most highly with total scores and with each other for the Std. 10 subjects. For the Std. 8s the sub-scale scores correlate reasonably well with total scores but correlations between sub-scales tend to be low. This suggests that the various aspects of identity formation develop more-or-less independently and only become synthesized in late adolescence during the crisis stage. This may also account for the finding that sub-scale intercorrelations tend to be low for the Moratorium sample.

Sub-scale V of the EIS is important because its 'derivatives' reflect the basic elements of a sense of identity as defined by Erikson. In contrast, most of the 'derivatives' of the other sub-scales were based on Erikson's description of the 'symptoms' of identity confusion. The finding that sub-scale V scores tend to correlate best with EIS total scores and that all the other sub-scale scores correlate significantly with sub-scale V scores on the whole contributes to the overall validity of the EIS.

Sub-scale V scores also differentiate significantly between the Moratorium→Achievement, Moratorium and Moratorium→Confusion Ss which is important because it suggests that sub-scale V scores may reflect identity development (hierarchical) to a certain extent. The only other sub-scale which differentiates between the Moratorium→Achievement and Moratorium Ss is sub-scale II which reflects the 'Self-certainty vs. Self-consciousness' dimension of identity formation.

Figure 2.2 shows that the Moratorium→Achievement Ss obtain their highest mean scores on these two sub-scales and there was also very little variation in their scores on these sub-scales (see Appendix E-3^{Table 3.}₄).

'Self-certainty vs. Self-consciousness' is related to the development of autonomy, and sub-scale II is the only sub-scale which discriminates between the Moratorium→Achievement Ss and the Foreclosed Ss. This finding confirms the contention that individuals who foreclose their identities fail to fully develop their autonomy. Sub-scale II scores also increase with age but mainly in late adolescence: the Std. 10s obtain a significantly higher mean score than the Std. 6s and the Std. 8s. This and the finding that the Moratorium→Achievement Ss obtain significantly higher mean scores (sub-scale II) than the Moratorium Ss support the theoretical argument that the development of autonomy is a crucial aspect of identity development in adolescence.

The only other sub-scale on which scores are significantly related to age (std.) is VI. The Std. 10s also obtain a higher mean score on this sub-scale than the two younger groups. It will be recalled that the meaning of sub-scale VI was not clear. According to Rasmussen (1961) it reflects the sixth stage (Intimacy vs. Isolation) but the two item

clusters which were retained in this sub-scale seem to be more closely related to identity issues. The first item cluster (derivative 17) reflects the ability to repudiate those ideas or people which are not congruent with one's identity and this requires both a sense of identity and independence. The second item cluster (derivative 18) reflects the ability to engage in warm, spontaneous relationships (versus emotional isolation).

Sub-scale VI scores correlate best with sub-scale II scores (except for the Foreclosed Ss) and sub-scale VI scores also tend to correlate significantly with sub-scale V scores. The results suggest, therefore, that sub-scale VI scores are related to the development of an autonomous sense of identity.

Sub-scale III fails to differentiate between most of the Identity Classifications and it also tends to correlate least well with total EIS scores. None of the item clusters of this sub-scale discriminated very well in the pre-test. The items for 'derivatives' 7 (Background) and 8 (Role Experimentation) are somewhat ambiguous (see Appendix B-1 b) and high scores may simply reflect conformity to socially acceptable roles. This interpretation is supported by the finding that the Foreclosed Ss obtain the highest mean score on this sub-scale. The items of 'derivative' 9 (which is supposed to reflect 'tireless initiative' - the result of identity foreclosure in the third stage) seem to reflect planning ability or time perspective and do not really fit into this sub-scale at all. It is suggested that sub-scale III should be thoroughly revised.

The remaining two sub-scales (I and IV) only differentiate significantly between those subjects who experience some identity confusion (Moratorium→Confusion Ss) and those who are not (the other identity categories). For the Moratorium→Confusion Ss sub-scale I scores correlate highly with EIS total scores ($r = .72$) but the sub-scale I mean score (6.35) is relatively high in comparison with their other means (see Fig. 2.2). This shows that 'time confusion' (indicated by low scores on this sub-scale) only really emerges in subjects who obtain very low EIS scores which suggests that it may be one of the more serious 'symptoms' of identity confusion.

Sub-scale IV~~2~~ reflects the 'work identity' dimension of identity formation (apprenticeship vs. work paralysis) and the finding that scores on this sub-scale correlate best with EIS total scores and with other sub-scale scores for the Foreclosed Ss is interesting. According to Erikson work is an important refuge from anxiety, and these results suggest that the ability to concentrate, the enjoyment of competition, and the anticipation of achievement in work endeavours are closely related to psychosocial adjustment in subjects who foreclose their identities. These characteristics are very desirable in a technological society and one would also expect many foreclosed identities to be consolidated around vocational roles.

The analysis of the EIS sub-scale scores has proved fruitful in several ways: It has provided further evidence for the overall validity of the EIS as a measure of identity versus identity confusion, but it is apparent that only three of the sub-scales tap identity development in adolescence (II, V and VI) although the meaning of sub-scale VI is still

not clear. Sub-scales I and VI only differentiate significantly between those who are experiencing identity confusion and those who are not, and sub-scale III seems to need revision. The results also support the contention that the development of autonomy is a crucial factor in identity development.

Independence items: It will be recalled that eight items were included in the EIS in order to revise the items for 'derivative' 5 (Independence) of sub-scale II but only two of these items discriminated in the same direction as total EIS scores. Therefore, the six items which failed to discriminate were not included in the final form of the EIS. These eight items reflect a rather superficial kind of independence from the family (see Appendix B-1b) and they have no proven validity. But they are the only items in the entire battery of questionnaires used in this study which attempt to measure independence directly, and for this reason scores on these eight items have been recorded separately in the data sheets (Appendix C-4). These scores, however, were not taken into account when the Identity Classifications were made.

The mean scores for these eight items have been calculated for various groups of subjects but the scores were not included in the statistical analysis because of the doubtful validity of the items. The mean scores for the sex and standard (age) sub-groups are as follows:

	<u>Std.6.</u>	<u>Std.8.</u>	<u>Std.10.</u>	<u>TOTAL.</u>
Males	4.7	5.2	6.3	5.4
Females	3.4	4.3	5.5	4.2
TOTAL:	4.2	4.8	6.1	5.0

This table shows that throughout the age period studied the boys obtain higher scores than the girls and that scores increase with age for both sexes.

The mean scores for the Identity Classifications are as follows:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>?Fore.</u>	<u>Pre-M.</u>
Males	6.8	5.3	4.8	5.2		
Females	5.6	4.9	3.7	3.9		
<hr/>						
TOTAL:	6.4	5.1	4.4	4.6	3.1	5.8

These results conform to theoretical expectations very well.

They suggest that the Foreclosed Ss are even more dependent than the Moratorium Ss although the differences are not likely to reach significance, and the differences between the Foreclosed and Moratorium→Confusion Ss are not likely to reach significance either.

The Independence items may provide a more accurate assessment of an individual's position along the independence versus dependence continuum than scores on sub-scale II of the EIS which measure 'Self-certainty vs. Self-consciousness'. The latter is related to Doubt and Shame and individual's who foreclose their identities avoid Self-consciousness and maintain some degree of Self-certainty by conforming to socially acceptable standards. This probably accounts for the finding that the Foreclosed Ss obtain a slightly higher mean score on sub-scale II of the EIS than the Moratorium Ss (despite the fact that the latter may be more independent as indicated by the Independence scores).

The above results provide further support for the contention that the development of independence is an important aspect of successful identity development in adolescence. The Moratorium→Confusion Ss obtain relatively low scores on the Independence items and lack of independence may constitute one of their major problems (perhaps it is a causative factor in identity confusion). On the other hand, the subjects who foreclose their identities 'accept' their dependence and use conformity to in-group standards to maintain inner controls (instead of establishing their own controls, i.e., autonomy).

5. Analysis of the Peer Nomination Form
Item Responses and Sub-scale Scores.

Response Patterns:

Subjects were required to nominate up to five of their peers per item. One of the Std. 6s did nominate five persons per item but the total number of nominations per form is given in the following table:

	STD. 6.		STD. 8.		STD. 10..	
	<u>Range.</u>	<u>Mean.</u>	<u>Range.</u>	<u>Mean.</u>	<u>Range.</u>	<u>Mean.</u>
Males	16 - 95	38.1	12 - 66	34.5	8 - 57	33.3
Females	20 - 94	48.4	24 - 65	40.5	19 - 78	34.3
TOTAL:	16 - 95	42.2	12 - 66	36.9	8 - 78	33.6

This table shows that the girls tend to make more nominations than the boys in each age group (std.) and that the total number of nominations made tends to decrease with age but more particularly for the girls.

The mean number of nominations made for each item is given in Appendix F-1, Table 1. This analysis shows that (1) the Std. 6s. make more nominations than the older subjects on almost every item, but on the positive items the Std. 8s do not necessarily make more nominations than the Std. 10s. On the negative items, however, the Std. 8s do respond more frequently than the Std. 10s.

(2) All age groups make more nominations on the positive items than on the negative items. The percentage of subjects who fail to make any nominations per item is generally low for the positive items and there are no major age differences, but more subjects make no nominations on the negative items and the percentage increases with age.

Table 2 in Appendix F-1 shows that the girls make more nominations than the boys on almost all the positive items but it is only in Std. 6. that the girls tend to make more nominations than the boys on the negative items. In general, the girls also fail to make any nominations at all less frequently than the boys except in Std. 10, and in Std. 8 for the negative items. To sum up: the Std. 6s make more nominations on all items than the older subjects and within this group the girls nominate more frequently than the boys on most of the items. The Std. 8s and 10s tend to make the same number of nominations per item on the positive items but the girls make more nominations than the boys. On the negative items the Std. 10s make less nominations than the Std. 8s and the girls tend to be more reluctant to make negative nominations than the boys.

The mean number of nominations per item varies quite considerably. The greatest number of nominations tend to be for Respect (1), Happy (3) and Popular (9); and the least number of nominations tend to be for Unhappy (4), Anxious (9), Isolated (10), Inadequate (14) and Tomboy (19). For the positive items the number of nominations per item correlates significantly with item position on the form (number of item) but there is no correlation for the negative items.

The Spearman rank correlation coefficients (p) are as follows:

	<u>Std. 6.</u>	<u>Std. 8.</u>	<u>Std. 10.</u>
Positive items:	.75 ($p < .05$)	.74 ($p < .05$)	.75 ($p < .05$)
Negative items:	.28 (n.s.)	.25 (n.s.)	.01 (n.s.)

It is interesting to note that relatively fewer nominations are made for item 5 (Identity) by the Std. 8s (and 17% make no nomination for this item) but item 6 (Identity Confusion) receives quite a number of nominations (relative to the other negative items).

Table 3 in Appendix F-1 gives the distribution according to sex of nominations made by the boys and girls separately. Inspection of this table shows that in Std. 6. and 8 subjects tend to nominate members of their own sex more frequently than members of the opposite sex on the positive items. In Std. 10 the boys nominate boys more frequently than the girls but the girls' nominations are more equally distributed on the positive items. In evaluating these results the fact that there are more boys than girls in each standard must be taken into consideration.

Chi square computations were done in order to test whether the nominations are distributed randomly according to sex (see Appendix F-1, Table 4) for the method used). On the positive items the Std. 6 boys nominate boys more frequently than girls ($X^2 = 3.89$, $p < .05$) and the Std. 6 girls nominate girls much more frequently than boys ($X^2 = 79.6$, $p < .001$); for the Std. 8 boys $X^2 = 1.64$ and does not reach significance but for the Std. 8 girls $X^2 = 35.9$ ($p < .001$); for the Std. 10 boys $X^2 = 4.95$ ($p < .05$) but for the Std. 10 girls $X^2 = .07$ which is not significant.

On the negative items the boys are nominated more frequently by both sexes in each standard, but the chi square computations only reach significance for the male nominators: Std. 6. boys ($X^2 = 15.4$, $p < .001$), Std. 8. boys ($X^2 = 23.2$, $p < .001$), and the Std. 10 boys ($X^2 = 6.4$, $p < .02$). For the girls $X^2 = .02$, .14, and .17 respectively.

There are two factors which may account for nominations not being randomly assigned according to sex: firstly, a 'bias' towards nominating members of one's own sex which could either reflect a true bias (i.e., same-sex peers are seen in a more positive light than opposite-sex peers) or simply that subjects know their same-sex peers better than their opposite-sex peers and therefore are in a better position to judge their same-sex peers' behaviour; and secondly, one sex group really 'deserves' more nominations than the other (i.e., an underlying sex difference).

If there is a true bias in the nominations one would expect subjects to nominate same-sex peers more frequently on positive items and opposite-sex peers more frequently on negative items. The data does not really support this interpretation. In the case of the second kind of 'bias' one would expect subjects to nominate same-sex peers more frequently on both positive and negative items. This tends to be the case for the male subjects in all age groups. If there are true sex differences in the data one would expect the same sex group to be nominated more frequently by both males and females which was not found to be the case.

It is suggested that a combination of these factors is operating. It will be recalled that the Std. 6. and 8 girls obtain higher mean scores than their male peers on the PNF I but that the Std. 10 means do not differ. Table 5 in Appendix F-1 shows that in Std. 6. and 8. the girls obtain proportionately more nominations than the boys (the mean number of nominations obtained per item is given) for most of the positive items and the boys obtain higher means for

most of the negative items. But in Std. 10 the boys obtain higher means on almost all the items (positive and negative) but the differences are quite small.

These differences could be the result of 'bias' on the part of the Std. 6. and 8. girls in favour of their own sex for the positive items (the chi squares were much greater for the girls than for the boys in these groups) but there is reason to believe that the Std. 8. girls at least 'deserve' higher scores than their male peers: they do better academically and the difference was most marked in the Foreclosed group which can be explained on theoretical grounds. Assuming that the Std. 6. and 8. girls do 'deserve' more positive nominations than their male peers then it is apparent that the boys are still 'biased' towards nominating their own sex and the girls are probably also 'biased' towards nominating their own sex (especially on the positive items).

This is a very complex issue and a thorough analysis of the effects of possible 'biases' on peer nomination scores is beyond the scope of this thesis. It is an issue which should be more fully investigated because it may impose certain limitations on the use of the peer nomination technique. The results of this study suggest that high school boys tend to nominate male peers more frequently than female peers on both positive and negative items but that high school girls tend to nominate girls more frequently than boys on positive items only, and that this 'bias' decreases with age. If this is so then male and female scores may not be directly comparable because the younger girls' scores may be inflated. The fact that there

were more boys than girls in these samples may have served to reduce discrepancies but the girls did make proportionately more nominations than the boys, especially on the positive items. These factors would also have to be taken into account when assessing the effects of response 'biases'.

Another factor which has been found to influence peer nominations are sexual stereotypes, i.e., girls tend to be nominated for qualities which are regarded as feminine and males are nominated for qualities which are regarded as masculine. There are no consistent trends in the data for any of the items which could be interpreted in this way (see Table 5, Appendix F-1). On item 11 (Harmony) the females do obtain consistently more nominations but the differences are not large enough to infer that stereotypes are involved.

PNF sub-scale scores:

Scores on the three sub-scales of the PNF were intercorrelated for the Developing and Foreclosed subjects (males and females separately).

	<u>Developing Ss.</u>		<u>Foreclosed Ss.</u>	
	<u>Males.</u>	<u>Females.</u>	<u>Males.</u>	<u>Females.</u>
I with II:	.61 ^{xxx}	.65 ^{xxx}	.56 ^{xx}	.45 [*]
I with III:	.54 ^{xxx}	.50 ^{xx}	.37 [*]	.59 ^{xx}
II with III:	.65 ^{xxx}	.28	.73 ^{xxx}	.20

Sub-scale I of the PNF seems to measure Social Respect versus Social Contempt while sub-scale II measures, at face value, Social Acceptance (popularity) versus Social Isolation. Scores on these two scales correlate quite highly for the Developing Ss but not quite as much for the Foreclosed Ss. Sub-scale III measures

* $p < .05$;

xx $p < .01$;

xxx $p < .001$.

Masculinity versus Effeminateness for the boys and it correlates moderately with I and highly with II. For the girls it reflects Femininity versus Tomboy and this correlates moderately with I but not with II.

Thus for the boys masculinity is closely related to social acceptance by one's peers and to social respect; and for girls femininity is not related to social acceptance but it is moderately related to social respect. Social acceptance and social respect are fairly closely related for both sexes but they are more closely related for the subjects who are developing an identity.

Age and sex differences: Mean scores on II and III increase with school standard (age) for the total sample and for both sex groups (see Appendix F-2, Tables 1 & 3) and the girls obtain higher mean scores than the boys in each standard. The sex differences are most marked for sub-scale III (104.5 versus 113.2) but these scores are probably not really comparable because the items are sex specific. On the PNF I the greatest sex difference was obtained for the Std. 8s (13.5 points) but this difference is only 4.7 points on sub-scale II.

Identity Classification differences: On sub-scale II the scores vary according to expectation for the male subjects:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Males	120.6	109.5	94.1	101.6	
Females	111.2	104.8	108.6	116.9	102.4

This suggests that for the male subjects social acceptance may be quite closely related to identity development. It is interesting to note that the Foreclosed males tend not to be very popular. The Foreclosed Std. 8. males obtained a low PNF I score (92.3) but they obtain a higher PNF II score (107.8). In contrast, the Foreclosed Std. 10 males obtained quite a high PNF I score (112.2) but they are not very popular (95.8).

For the girls social acceptance (PNF II) does not seem to be very closely related to identity development but the Foreclosed girls obtain the highest scores in each school standard although there is not much difference between the Foreclosed and Moratorium Std. 6. girls (see Table 2 in Appendix F-2). These results provide further evidence for Marcia & Friedman's hypothesis (1970) that identity foreclosure is 'adaptive' for girls.

Sub-scale III scores seem to be quite closely related to identity development for both the boys and the girls:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>PreM.</u>
Males	125.2	108.7	88.2	98.2	
Females	138.2	109.1	96.7	120.4	103.7

For the Foreclosed subjects a similar pattern emerges once again: the boys tend to be regarded as rather effeminate (especially the Std. 10s - 90.9) but the girls are regarded positively (see Appendix F-2, Table 4). The establishment of independence is probably a part of 'masculinity' in adolescence but it is not a concomitant of the 'femininity' stereotype. This may account for much of the sex difference in the Foreclosed Ss scores on PNF III.

The results suggest that social contempt (PNF I), social isolation (PNF II), effeminateness (PNF III) and lack of autonomy (high F-Scale scores and low Independence scores) tend to be related for boys and are found in boys who are experiencing identity problems (Moratorium→Confusion) or have foreclosed their identity development.

Douvan & Adelson (1966) found that girls who expressed 'anti-feminine' goals tended to be maladjusted and to lack personality integration. The relatively low PNF III score (96.7) obtained by the Moratorium→Confusion girls supports this finding. The PNF III scores are probably related to sexual identity and those who obtain low scores may be confused about their sexual identities.

6. Analysis of the Problems Scale Responses

Overall response patterns: Five response categories were provided on the Problems Scale, and the number of times each response category was used by each group of subjects was computed.

TABLE 3.14 Percentage of responses in each response category on the Problems Scale for different groups of subjects.

<u>Sample.</u>	<u>N.</u>	<u>Response Categories</u>				
		<u>Never.</u>	<u>Resolved.</u>	<u>Minor.</u>	<u>Mod.</u>	<u>Major.</u>
TOTAL.	167 [*]	44	14	29	9	5
Males.	101	47	14	27	8	4
Females.	66	39	13	31	10	6
Std. 6.	60	42	10	32	10	6
Std. 8.	50	44	13	29	8	6
Std. 10.	57	45	19	24	8	4
M→Ach.	18	50	23	22	4	1
Mora.	50	36	13	34	11	6
M→Con.	18	19	12	40	19	10
Fore.	52	54	14	25	5	2
? Fore.	7	26	8	29	19	18
Pre-M.	10	72	5	19	3	1

For the total sample just under half of all the responses are in the 'never worried me' category while 29% are in the 'worries me sometimes' category (minor problem). Very few subjects 'worry fairly often' (moderate problem) or 'worry very much' (major problem) about any of the problem areas included in the Problems Scale.

Footnote:^{*} The 11 extra subjects included in this analysis had completed the shorter questionnaires but not the Ego Identity Scale. Therefore they could not be included in the general analysis and their responses were not included in the analysis of Classification differences.

There are no marked sex differences but the girls tend to check more items as problems than the boys do. The percentages for each school standard show that the number of items checked as 'resolved' increases with age as would be expected, and consequently the percentages of problem responses decreases with standard.

In analysing the response patterns for each Identity Classification the subjects classified as '? Foreclosed' were treated separately. The results for the Identity Classifications fulfil our expectations on the whole. The greatest percentage of 'resolved' responses is for the Moratorium→Achievement Ss and the lowest is for the Pre-Moratorium Ss. The latter group also reports the least number of problems and the Moratorium→Confusion Ss report the greatest number of problems. The greatest proportion of 'major problems' is reported by the '? Foreclosed' Ss but they use the 'never' category more than the Moratorium→Confusion Ss. The Foreclosed Ss use the 'never' category more than the subjects in the moratorium classifications and they report very few 'moderate' or 'major' problems.

Item Analysis of the Problems Scale:

For each item of the Problems Scale the frequency distribution of the responses in each category was tabulated for each group of subjects. In order to obtain an index of the importance of each problem area (item) the responses in each category were weighted as in the scoring procedure and summed. The figure obtained was then divided by the number in the group and multiplied by 100 so that the data is comparable across groups. This final figure will be termed the "score" for each item.

Table 3.15 shows that school work (item 1), choosing a career (item 3), physical appearance (item 6), money matters (item 4), choosing a curriculum (item 9) and moral issues (item 15) are the most frequently reported problems by the adolescents in this sample. More than 65% of these subjects check each of these items as a current or resolved problem. Only 8% report that school has 'never worried' them. Religious matters (item 11) constitutes the least important problem with sport (item 14) and feelings of confusion (item 7) also being relatively infrequent problems.

TABLE 3.15: Total Sample (N=167): Overall Ranking of the Problems Scale Items based on the 'Scores' and the Frequency Distribution of the responses in each category.

<u>Overall Ranking</u>			<u>Frequency Distribution (N=167)</u>				
<u>Item.</u>	<u>Rank.</u>	<u>'Score'.</u>	<u>Never.</u>	<u>Resolved.</u>	<u>Minor.</u>	<u>Mod.</u>	<u>Major.</u>
1. School work.	(1)	226	14	11	83	36	23
3. Career.	(2)	178	29	49	41	25	23
6. Appearance.	(3)	154	57	16	57	20	17
4. Money.	(4)	146	60	15	62	15	15
9. Curriculum.	(5)	145	43	46	45	25	8
15. Moral.	(6)	130	54	32	62	15	4
12. Dating.	(7)	114	76	25	42	15	9
13. Misunderstood	(8)	107	78	19	55	11	4
10. Siblings.	(9)	101	91	13	42	13	8
8. Teachers.	(10)	95	85	13	62	6	1
5. Parents.	(11)	82	99	17	36	12	3
2. Friends.	(12)	81	92	28	37	7	3
7. Confused.	(13)	73	100	24	33	8	2
14. Sport.	(14)	72	107	22	29	5	4
11. Religion	(15)	63	110	20	28	6	3

The problems which are most frequently reported as 'resolved' are the vocational issues (items 3 and 9) and the problem area which is least often reported as 'resolved' is school work (item 1).

TABLE 3.16: Sex and Age Differences in the Problems Scale Items.

Item.	Males. (N=101)	Females. (N=66)	Std. 6. (N=60)	Std. 8. (N=50)	Std. 10. (N=57)
1. School work.	210 (1)	250 (1)	233 (1)	228 (1)	216 (1)
3. Career.	170 (2)	191 (3)	150 (5)	216 (2)	175 (2)
6. Appearance.	117 (6)	212 (2)	168 (2.5)	146 (5)	146 (3)
9. Curriculum	134 (4)	164 (4)	165 (4)	148 (3.5)	123 (5)
15. Moral.	119 (5)	147 (5)	168 (2.5)	134 (6)	84 (9)
12. Dating.	100 (9)	135 (7)	142 (7)	116 (7)	82 (10)
13. Misunderstood.	108 (7)	105 (10)	122 (9)	100 (10)	96 (7)
10. Siblings.	86 (10)	123 (8)	140 (8)	104 (9)	56 (14)
8. Teachers.	103 (8)	83 (13)	85 (11.5)	108 (8)	95 (8)
5. Parents.	77 (11)	89 (12)	68 (15)	74 (12)	104 (6)
2. Friends.	58 (15)	115 (9)	90 (10)	76 (11)	75 (11)
7. Confused.	61 (13.5)	91 (11)	75 (14)	72 (13)	72 (12)
14. Sport.	66 (12)	67 (14.5)	80 (13)	52 (15)	65 (13)
11. Religion.	61 (13.5)	67 (14.5)	85 (11.5)	60 (14)	44 (15)

The items are presented in this table according to the ranking for the total sample. In brackets under each score is the rank of the item for each group.

Sex differences: Table 3.16 shows that the girls obtain higher 'scores' on all items except money matters (item 4) and teachers (item 8), and there is very little difference between the 'scores' on another four items: feeling misunderstood by others (item 13), sport (item 14), relations with parents (item 5) and religion (item 11). The most marked differences, however, occur for two items: physical appearance (item 6) ranks as the second most important problem for the girls and only sixth for the boys, and peer relations (item 2) ranks ninth for the girls but last for the boys.

The sex differences are the same within each school standard for most items (Appendix G-1) but there are a few interesting exceptions. In the Std. 8. group 'choosing a career' (item 3) is a greater problem for the boys than for the girls while in the Std. 10 group it is a much greater problem for the girls (215) than for the boys (154). Money matters (item 4) is only of less importance for the girls than for the boys in Std. 6. Problems with parents (item 5) 'scores' are similar for both sexes in Stds. 6. and 8. and ranked low, but in Std. 10 the 'scores' for the girls (130) is considerably higher than for the boys (89).

Age differences: For all items except five (3, 4, 5, 7 and 8) the 'scores' decrease with school standard (age). The most marked decreases concern the establishment of moral standards (item 15) which ranks second for the Std. 6s, sixth for the Std. 8s and ninth for the Std. 10s. The decrease is most marked for the girls between Std. 6 and 8, but remains a fairly serious problem for the Std. 8. boys (ranks fourth) and then decreases sharply for the Std. 10 boys (ranks tenth). Problems concerning relations with siblings (item 10)

also decrease markedly with age. Physical appearance (item 6) 'scores' are highest for the early adolescents (Std. 6s) and then decrease sharply.

The problems which increase with school standard concern 'choosing a career' (item 3) and relations with parents (item 5). Among the boys the vocational problem is most serious in Std. 8. and even takes precedence over school work (item 1). Problems with parents 'scores' increase most markedly in late adolescence ranked sixth for the Std. 10s) and especially for the Std. 10 girls (ranked fifth). Problems with teachers (item 8) also tend to increase with age but are most frequently reported by Std. 8. subjects.

Sex differences in age trends (Appendix G-1) exist for three items: money matters (item 4) 'scores' increase with age for the girls and decrease for the boys; peer relations problems (item 2) and feelings of confusion (item 7) decrease with age for the girls but increase with age for the boys.

Identity Classification differences: For the moratorium classifications one would expect (from the method of classification used) a continuum of 'scores' with the Moratorium→Achievement Ss obtaining the lowest 'scores' and the Moratorium→Confusion Ss, the highest. The first three columns in Table 3.17 show that this is the case for all the items except two (items 1 and 3) which fail to differentiate between the Moratorium Ss and Moratorium→Confusion Ss. These items are checked as problems by the majority of subjects in both these groups (see Appendix G-2, Tables 2 and 3.).

TABLE 3.17 : Identity Classifications: Differences in the Scores and Ranks (in brackets) for the Problems Scale Items.

Item.	M→Ach. (N=18)	Mora. (N=50)	M→Con. (N=18)	Fore. (N=52)	?Fore. (N=7)	Pré-m. (N=10)
1. School work.	188 (1)	240 (1)	239 (2)	213 (1)	343 (1)	190 (1)
3. Career.	105 (4.5)	228 (2)	222 (5)	140 (2)	286 (2)	120 (2)
6. Appearance.	144 (2)	192 (3)	228 (3.5)	94 (5.5)	257 (4.5)	40 (10)
4. Money.	117 (3)	170 (6)	267 (1)	94 (5.5)	271 (3)	80 (4)
9. Curriculum.	55 (10)	176 (4)	205 (6)	117 (3)	257 (4.5)	90 (3)
15. Moral	61 (9)	172 (5)	178 (9)	104 (4)	186 (8)	60 (5.5)
12. Dating.	77 (7)	128 (7)	178 (9)	86 (7)	229 (6)	50 (7.5)
13. Misunderstood.	105 (4.5)	108 (10)	228 (3.5)	77 (9)	157 (11)	50 (7.50)
10. Siblings.	50 (11.50)	114 (9)	178 (9)	79 (8)	186 (8)	60 (5.5)
8. Teachers.	94 (6)	122 (8)	150 (13)	58 (12)	171 (10)	40 (10)
5. Parents.	67 (8)	80 (13.5)	161 (12)	67 (11)	71 (14)	30 (12)
2. Friends.	50 (11.5)	88 (11.5)	167 (11)	69 (10)	100 (13)	0 (14)
7. Confused.	33 (14.5)	76 (15)	200 (7)	40 (13.5)	186 (8)	0 (14)
14. Sport	33 (14.5)	88 (11.5)	144 (14)	23 (15)	57 (15)	40 (10)
11. Religion	38 (13)	80 (13.5)	117 (15)	40 (13.5)	129 (12)	0 (14)

The items are presented in this table according to the ranking for the total sample. In brackets under each score is the rank of the item for each group.

The items which differentiate best between the Moratorium→Achievement Ss and the Moratorium Ss are:

choice of career (item 3): 123 points (difference);
 choice of curriculum (item 9): 121 points;
 establishment of moral standards (item 15): 111 points;
 sibling relations (item 10): 64 points.

The first three items mentioned above are checked as 'resolved problems' by at least one third of the Moratorium→Achievement Ss (Appendix G-2, Table 1).

The greatest differences between the Moratorium and Moratorium→Confusion subjects are for:

feelings of confusion (item 7): 124 points;
 feeling misunderstood (item 13): 120 points;
 money matters (item 4): 97 points;
 relations with parents (item 5): 81 points;
 peer relations (item 2): 79 points;
 sibling relations (item 10): 64 points.

The most serious problems of the Moratorium→Confusion Ss concern money matters (item 4), school work (item 1), physical appearance (item 6), identity issues (items 7 and 13) and vocational issues (items 3 and 9). These items are each checked as problems (past and present) by at least 83% of the subjects in this sample.

Problems in interpersonal relationships (siblings, dating, peers, parents and teachers) and in 'moral' issues (item 15) are each checked as problems by at least 67% of the group; while religion (item 11) and sport (item 14) are reported as problems by over 50% of the Moratorium→Confusion Ss (Appendix G-2, Table 3).

Turning to the results of the Foreclosed subjects, it is apparent that school work (item 1) is the only item which is checked as a problem by the majority of this group. Vocational issues (items 3 and 9) and moral issues (item 15) are each checked as existing problems by about 40% of the Foreclosed Ss, and these three items are also checked as 'resolved' by these subjects more often than other items (Appendix G-2, Table 4). The Foreclosed Ss obtain even lower 'scores' than the Moratorium→Achievement Ss on three items:

appearance (item 6): 50 points;
 'misunderstood' (item 13): 28 points
 money matters (item 4): 23 points.

The Foreclosed Ss do not obtain higher 'scores' than the Moratorium Ss on any of the items.

The 'Foreclosed' subjects obtain high Problems Scale scores which was the main reason why they were not classified as Foreclosed (indicated by their high F-scale scores). School work (item 1) is a serious problem for all subjects in this group, and on the whole this group obtains the highest 'scores' for individual items. But they obtain lower 'scores' than Moratorium→Confusion Ss on five items:

relations with parents (item 5): 90 points;
 sport (item 4): 87 points;
 'misunderstood' (item 13): 71 points;
 peer relations (item 2): 67 points;
 'confusion' (item 7): 14 points.

The Pre-Moratorium Ss obtain the lowest 'scores' on most of the Problems Scale items.

Discussion:

The analysis of the Problems Scale items for the total sample and for the different age (Std.) and sex groups provides normative descriptive data and will not be discussed in any detail here. There is a considerable amount of agreement between these findings and those of Kaczkowski (1969), Adams (1964) and the MPCL studies reported by Morgan (1969) but the methods of data collection differ so markedly that the studies are not directly comparable. One point that is worth commenting on is that in the above studies 'religious' and 'moral' problems were usually grouped together and found to be of little importance to adolescents. However, this study has shown that religious issues very seldom cause concern while moral issues frequently do trouble adolescents.

Most of the items of the Problems Scale reflect the major adolescent problem areas which have been found in empirical research. One of the aims of this study was to investigate whether these adolescent problems are related to identity formation. Problems which are related to identity development should be checked more frequently by subjects who are developing an identity than by those who have foreclosed their identity formation or are still in the pre-moratorium stage. Within the developing group one would expect the Moratorium→Achievement Ss to check problems as 'resolved' more frequently than subjects in other categories and one would expect the Moratorium→Confusion Ss to experience problems more frequently than subjects in other categories.

The only problem which fails to differentiate very much between the Identity Classifications in the above way is school work (item 1). This seems to be a pervasive problem during adolescence - problems in this area are most frequent and they are seldom resolved during adolescence. This is understandable because school work occupies most of the high school pupil's day and academic achievement is valued by parents and school. School work problems, therefore, do not seem to be specifically related to identity development although personality problems may aggravate school work problems in some cases.

The second most pervasive problem concerns vocational choice (item 3). Theoretically this problem is closely related to identity formation and the results support this: 55% of the Moratorium→Achievement Ss check this problem as 'resolved' and over 70% of the Moratorium and Moratorium→Confusion Ss check it as a current problem. It is interesting to note that this item does not differentiate between these two categories and that about 43% of the Foreclosed Ss check it as a current problem. But the Foreclosed Ss still obtain a much lower score than the Moratorium Ss. The results for the other vocational item (9) are similar and these results will be further discussed in the next section dealing with vocational issues.

The items which were found to differentiate best between the Identity Classifications are given in the table below. The percentage of subjects in each category who checked each of the items as a current problem is also given.

<u>Item.</u>	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>?Fore.</u>	<u>Fore.</u>	<u>Pre-M.</u>
(7) 'Confusion'	11%	26%	80%	70%	11%	0%
(13) 'Misunderstood'	44%	44%	89%	44%	29%	20%
(4) Money.	33%	62%	89%	86%	43%	40%
(6) Appearance.	44%	72%	80%	86%	39%	20%
(5) Parents.	22%	30%	61%	30%	27%	10%

Items 7 and 13 were included in the scale to tap identity problems and both these items discriminate very well between the Identity Classifications. Item 7 reflects conscious feelings of confusion and the results support Erikson's contention that the majority of adolescents do not consciously experience feelings of identity confusion. It is mainly the Moratorium→Confusion and ?Foreclosed Ss who check this item as a problem. This suggests that the ?Foreclosed Ss are experiencing an identity crisis despite their high F-Scale scores. Item 13 reflects a manifestation of identity problems (feelings of not being understood, recognized or approved of by others.).

These results also suggest that money problems (item 4) can be related to identity problems. About 40% of the Moratorium→Achievement Ss check this problem as 'resolved'. Adolescent concern over 'money matters' may reflect anxiety about financial dependence on parents and therefore, indirectly, the problem of achieving independence.

One would expect concern about physical appearance (item 6) to be related to identity problems. According to Erikson, the "feeling of being at home in one's body" is a basic element of a sense of identity, and physical appearance is also related to sexual identity and the image which one presents to others. This item is checked as a problem

much more frequently by the girls which suggests that appearance plays a more important part in the identity formation of girls than of boys.

This study supports the conclusion of Douvan & Adelson (1966) that relations with parents do not constitute a problem for most adolescents. 59% of the total sample check item 5 as 'never a problem' but the above analysis shows that problems with parents usually coincide with more severe identity problems. This problem was also found to increase with age (std.) which supports the argument that conflict with parents is often related to the growth of independence. The ?Foreclosed Ss seldom report problems with parents and this may be related to their very high F-Scale scores (indicating an acceptance of authority and dependence).

To sum up: the results of this analysis suggest that some of the problem areas reflected in the Problems Scale may be regarded as 'normal' concomitants of identity formation because they are experienced by the majority of subjects who are developing an identity. These problems are choosing a career (item 3), choosing a curriculum (item 9), money matters (item 4), physical appearance (item 6) and moral issues (item 15). These items are most frequently checked as 'resolved' by the Moratorium→Achievement Ss and they are checked as current or resolved problems by at least 75% of the Moratorium and Moratorium→Confusion Ss. These items are also checked as problems by the Foreclosed Ss but less frequently (see Appendix G-2).

But the problems involving interpersonal relations - friends (item 2), dating (item 12), teachers (item 8) and siblings (item 10) - and feelings of being misunderstood (item 13) do not seem to be necessary components of identity formation. They are experienced by between 50% and 60% of the Moratorium Ss and more frequently by the Moratorium→Confusion Ss. Feeling misunderstood (item 13), however, is experienced by all the subjects in the latter category. Feelings of identity confusion (item 7) are only experienced by subjects with more severe identity problems and problems with parents (item 5) are mainly experienced by Moratorium→Confusion Ss. Religious (item 11) and sport (item 14) problems are seldom reported on the whole but they are checked as problems more frequently by the subjects experiencing identity confusion.

The overall Problems Scale scores were found to differentiate very well between the Identity Classifications: $F(4/149) = 50.38$; and the item analysis suggests that all the major problem areas in adolescence (except school work) which have been found in empirical research can be related to identity formation. The item analysis is contaminated by the fact that overall Problems Scale scores were used in making the identity classifications but the finding that the identity items (3 and 9) discriminate very well between the Identity Classifications contributes to the validity of the findings.

The results suggest that the majority of adolescents are able to form their identities without experiencing too many problems but that difficulties in identity formation influence almost every aspect of the individual's life and interpersonal relationships. But though the data is suggestive, it does not really allow one to establish the exact nature of the relationship between specific problem areas and identity formation, i.e., which problems are more directly a part of identity development, which are caused by identity problems and which cause or aggravate difficulties in establishing an identity.

7. Vocational Plans

The Vocational Plans Questionnaire is a crude instrument which was designed to obtain data which could be used to classify each subject according to theoretically defined types or stages in the development of a 'vocational identity'. The Assessment Schedule and the Classification Criteria are contained in Appendix B-3(b) and (c). The raw data and 'vocational identity' classification of each subject is presented in Appendix H-1. The subjects are arranged in the same order as in the main raw data sheets in Appendix C-4. Before considering the relationship between 'vocational identity' and overall identity formation in greater detail, a brief analysis of age, sex and socio-economic differences in the Vocational Plans Questionnaire data will be presented. This analysis is of necessity rather crude because the data is superficial and not easily quantifiable.

Vocational Choice: In order to analyse the content of the vocational choices the First Choices (responses to item 9a) are considered separately from the Alternative Choices (responses to item 9 (b) and (c) and item 11) and the boys' responses are dealt with separately from the girls' responses. To reduce the number of variables the vocational choices given have been divided into different vocational categories (see Appendix H-2).

Although the boys have given a wide variety of vocations as First Choices (Appendix H-2, Table 1) the majority (41%) have chosen professional or semi-professional careers (see Table 3.18) despite the fact that very few of them have fathers in the professions. The most frequent choice is the Engineering field, followed by Architecture (chosen mainly by Std. 6s) and Teaching (but only one boy has chosen Primary School Teaching).

TABLE 3.18: Distribution of Boys' First Choices in each Vocational Category for each School Standard.

Category	Std. 6.	Std. 8.	Std. 10.	TOTAL.
Professional & Semi-professional.	17 (50%)	8 (29%)	14 (42%)	39 (41%)
Business, Clerical.	6 (18%)	2 (7%)	6 (18%)	14 (15%)
Technical.	2 (6%)	2 (7%)	7 (21%)	11 (12%)
Artisan.	-	5 (18%)	-	5 (5%)
Services.	3 (9%)	3 (11%)	1 (3%)	7 (7%)
'Entertainment'.	2 (6%)	-	1 (3%)	3 (3%)

The majority of Alternative vocations considered (Appendix H-2, Table 1) are also in the professional or semi-professional sphere with Teaching, Engineering, Scientific work, Medicine and Accountancy being the most frequent. Thus the majority of male adolescents in this population (mainly middle class) aspire to professional status.

The table above suggests that the Std. 6 boys have the highest aspirations and the Std. 8s the lowest. A common finding is that vocational choices tend to be unrealistic and idealistic in early adolescence and become more realistic towards the end of adolescence (Gold & Douvan, 1969).

The boys' data in this study supports this finding: many of the choices of the Std. 6 boys are over-ambitious (in terms of their academic achievement) and some of their Alternatives suggest fantasy pre-occupations, e.g., Film Star, Fireman (see Appendix H-2, Table 1). In contrast, the responses of the Std. 8s and 10s are more realistic and very few mention 'glamorous' occupations. The apparently lower aspirations of the Std. 8 boys may be due to the fact that a greater proportion of this class do poorly academically than in Std. 6 or 10.

TABLE 3.19: Distribution of Girls' First Choices in each Vocational Category for each School Standard.

Category	Std. 6.	Std. 8.	Std. 10	TOTAL.
Professional & Semi-professional.	10 (45%)	10 (45%)	6 (35%)	26 (43%)
Social Service.	3 (14%)	3 (14%)	1 (6%)	7 (11%)
Clerical.	8 (36%)	2 (9%)	4 (24%)	14 (23%)
'Technical'	1 (5%)	4 (18%)	5 (29%)	10 (16%)
"Don't Know"	-	3 (14%)	1 (6%)	4 (7%)

The First Choices of the girls (Appendix H-2, Table 2) are very conventional for the most part. 28% have chosen Teaching and 18% have chosen Secretarial work. The Std. 6 girls are more realistic in their First Choices than their male counterparts and on the whole there are no striking age differences. The Std. 6 girls do choose High School Teaching mainly while the Std. 8 and 10 girls choose Primary School Teaching mainly. Like the boys, however, the majority (43%) choose professional or semi-professional careers.

Most of the Alternatives given by the girls are also in the professional sphere with Teaching heading the list. Medicine and Veterinary are also frequent Alternatives but these decrease with age (standard). Secretarial work, Nursing and Air Hostess are frequently considered as Alternatives but the latter decreases with age as does Modelling. Thus there is evidence that the girls' responses also become more realistic with age. Only one girl gives Housewife as an Alternative choice. The girls "Don't Know" what they want to do less frequently than the boys and on the whole there are surprisingly few of these responses.

Socioeconomic differences in vocational choice: The table in Appendix H-3 shows the distribution of First Choices for each socioeconomic category and suggests that for the boys there is quite a strong relationship between vocational aspirations and fathers' occupational status: 59% of the boys from the upper-middle class (I) choose professional or semi-professional careers in contrast to 39% from category II and 22% from category III (lower-middle class). These figures suggest that at least 60% of the boys aspire to an occupational status which is above that of their fathers while there are only about 3% (excluding those who responded "Don't Know") who might be considered 'downwardly mobile' in their aspirations. But the data is too scanty to make any reliable judgements concerning mobility aspirations of these subjects.

Although the greatest proportion of girls choosing professional or semi-professional occupations is from category I (59%) there appears to be no clean relationship between fathers' occupational status and daughters' vocational choice. It is almost impossible to make accurate judgements concerning the mobility aspirations of the girls because of the ambiguous status of many of their vocational choices (eg. secretarial jobs).

Intention to go to university:

	<u>Males</u>			<u>Females</u>		
	Yes.	?*	No.	Yes.	?+	No.
Std. 6.	50%	32%	18%	36%	41%	23%
Std. 8.	18%	50%	32%	27%	27%	46%
Std. 10.	41%	22%	37%	18%	18%	65%
TOTAL	37%	34%	29%	28%	29%	43%

* Includes responses 'Maybe', 'Probably' and 'Don't know'.

The table shows that a much greater proportion of boys than girls 'intend' to go to university or entertain the possibility of going. It also shows that the number who do not intend going to university increases with age for both sexes but very markedly for the girls. This supports the contention that vocational plans become more realistic with age during the adolescent period. By Std. 10 the number of subjects who are not sure about going to university (?) is relatively small as one would expect.

Commitment, Realism and Consideration of vocational choices:

The degree of commitment to the First Choice, the realism of this choice (in terms of academic ability) and the amount of consideration given to this choice were roughly assessed according to separate 7-point rating scales. The median ratings for different groups of subjects are given in the following table:

	<u>Commitment.</u>		<u>Realism.</u>		<u>Consideration.</u>	
	M.	F.	M.	F.	M.	F.
Std. 6.	4.4	5.2	4.0	4.6	2.9	3.0
Std. 8.	4.1	4.3	4.7	5.3	3.4	4.0
Std.10.	6.0	5.3	5.7	6.6	4.5	5.5
Total:	4.8	5.0	4.5	5.1	3.4	3.7

The Commitment figures suggest that the Std. 8s are less willing to express commitment than the Std. 6s while the Std. 10s express the greatest amount of commitment. In general, the girls express tentative commitment to their choices but are unwilling to make definite commitments even in Std. 10. The Std. 6 and 8 boys express varying degrees of commitment but by Std. 10 most of them are prepared to make definite commitments to their vocational choices.

Both the degree of Realism and Consideration increases with age (standard) and the girls tend to be more realistic and to have given more consideration to their vocational choices than their male peers. Nevertheless the amount of consideration given in Std. 6. is generally low.

Summary and Discussion: The findings based on the Vocational Plans Questionnaire responses should be regarded as suggestive only as the data is very superficial. Only the major findings will be discussed.

(1) The greatest proportion of the subjects choose professional or semi-professional careers and intend to further their education at university. It was estimated that at least 60% of the male sample are 'upwardly mobile' in their vocational aspirations and only a negligible minority choose occupations of a lower status than their father's.

Despite the fact that nearly all the subjects come from middle-class homes (i.e., not professional) these results are not really surprising as the sample represents the upper stratum of intelligence and academic ability in this school (mean I.Q. = 110.8). On the whole the vocational plans of the subjects are commensurate with their academic achievement (which probably explains the lower aspirations - vocational choices and university plans - of the Std. 8 boys) although the results also suggest that the father's occupational status does influence vocational choice to a certain extent (more marked for the boys).

(2) The second major finding, which supports other work in the field, is that realism in vocational plans tends to increase with age (school standard): the vocational choices, university plans and the 'Realism' ratings all indicate this. The girls tend to be more realistic than their male peers in all standards and the data also suggests that the girls are less ambitious than the boys in general (especially in university plans).

(3) Relatively few subjects said they did not know what they wanted to do. It seems that throughout adolescence the majority have a fairly good idea about what they want to do (although their choice may not be realistic) and this may explain the relatively high 'Commitment' ratings. The girls tend to be less ready to make definite commitments to an occupational choice than the boys.

A subjective impression of the VPQ responses is that vocational choice becomes a fairly serious consideration during Std. 8 (particularly for the boys): this group obtains the highest Problem 'score' for item 3 (see section 6, Table 3.16) and the lowest 'Commitment' median rating. For most of the Std. 6s the choice of career does not seem to be a major concern although the choice of curriculum is considered a problem by many of them. The majority have made a vocational choice and they often express commitment to it and claim that the problem of 'choosing a career' has been resolved. But there is little evidence of realistic consideration of vocational issues in their (Std. 6s) VPQ responses, they obtain a relatively low Problem 'score' for item 3, and a considerable number of the Std. 6s were classified as Vocational-Pre-Moratorium (see Appendix H-5.).

By Std. 10 most, but not all, of the subjects appear to have resolved the problem of choosing a career or have succeeded in narrowing down the field. Most of the Std. 10 boys express commitment to their vocational choice but a few do not appear to be very realistic. Almost all the boys will have another year (military service) during which to come to a final decision.

The relationship between 'vocational identity' and overall identity formation: The 'vocational identity' classifications and the overall identity classifications were compared in section 1 and showed that the degree of agreement is not very great between the two. The vocational plans data for subjects in each Identity Classification (overall) is given in Appendix H-1.

Of the 18 subjects who are consolidating their identities (Moratorium → Achievement) nine are classified as having established a vocational identity and three appear to have almost resolved this issue. The VPQ responses of two others seem to indicate a foreclosed-Vocational-Identity but definite classifications could not be made. Thus 77% of this group have more-or-less resolved their 'vocational identities'. The remaining four cases were difficult to classify because their choices do not seem to be realistic despite the fact that they express commitment (or tentative commitment) and three of them consider the problem of vocational choice to be resolved.

The majority of the Moratorium Ss (56%) seem to be in the process of resolving their vocational identities. A few were classified as moratorium → achievement (10%) and these were mainly Std. 10 girls. 14% seem to be rather confused about their vocational identities and these were mainly boys (including all the Std. 10 boys). A few of the younger subjects express commitment to an unrealistic choice and report that they resolved the problem of choosing a career. These subjects were classified as pre-moratorium. For most of the Std. 6. subjects in the Moratorium category choosing a career is not considered a problem and the boys tend to be rather ambitious in their choices.

But by Std. 8 choice of career is a more serious matter - the choices are more realistic - and they are less willing to express commitment.

Although choosing a career is considered a problem by nearly all of the Moratorium→Confusion Ss it does not appear to be a major issue for most of them. Only 26% of them appear to be really confused about their vocational identities while 47% were classified as moratorium. Only three (17%) say they 'don't know' what they want to do but few of them are prepared to make even tentative commitments to their choices.

Only 12 (23%) of the Foreclosed Ss are classified as foreclosed in their vocational identities but only 18 subjects in the whole sample could be classified as vocational foreclosure according to the criteria which were laid down. 29% of Foreclosed Ss are classified as pre-moratorium (mainly Std. 6s who often express commitment to an ambitious choice) and 28% as vocational-identity-achievement and moratorium→achievement. Thus the majority (73%) of the Foreclosed Ss have fairly firm ideas about the vocations they wish to follow and only 21% consider vocational choice to be a 'moderate' or a 'major' problem. But the results suggest most Foreclosed subjects do give their vocational choices some consideration. This does not necessarily mean that changes or development take place of course.

Most of the ?Foreclosed Ss seem to be unsure about what they want to do, and find choosing a career a serious problem. The majority (70%) of the Pre-Moratorium Ss are classified as pre-moratorium in their vocational identities as well and the remaining three subjects could not be classified with any certainty.

An analysis of the reasons which are given for vocational choices is summarized in Appendix H-4. Interest (I) and liking for the work (L) are the reasons most frequently offered. This supports the findings of Gribbons & Lohnes (1965). The next most frequent reason is "One has to work so as to earn a living and keep oneself busy" (D). This reason is given by a third of the Moratorium→Confusion Ss and by about 20% of the Moratorium Ss. It is checked least frequently by the Foreclosed Ss. Subjects who check this reason may not regard vocational pursuits as very important and these Identity Classification differences are interesting.

Parental advice (C) is checked as a reason mainly by Moratorium and Foreclosed S. "Your father or mother or someone you know does this kind of work" (A) is checked mainly by Foreclosed S. Only five boys have chosen the same occupation as their father and four of these are Foreclosed. Other reasons which are given infrequently concern ability and being successful (G) - mainly by Foreclosed Ss; good salary or financial security (F) - mainly by boys; service to others (S) - mainly by girls; and travel (T). Meeting people (P), ambition (N), "My own choice" (M), and wanting to leave school (O) are each given by one subject.

Despite the fact that interest and/or a liking for the work are given as reasons by a large number of these subjects one gains the impression that very few of them have really thought out their vocational futures or is it because they find it difficult to verbalize their reasons? One Std. 6 boy who has chosen geology was very articulate: "I enjoy wild life, nature and beauty. Stones excite me. The sea seems a part of me."

Although a certain amount of agreement between the two sets of classifications was found, one hesitates to draw any conclusions from this data because the Vocational Plans Questionnaire is a very crude instrument and many of the 'vocational identity' classifications may be unreliable. For instance, it was extremely difficult to assess from the VPQ responses whether vocational choices have been given serious consideration or not, whether these choices have been made independently, and how genuine the expressed commitment is (especially for the younger subjects).

The unreliability of the vocational identity classifications together with some misclassifications according to the overall identity categories could account for much of the disagreement in the results. Nevertheless the results do raise doubts about whether vocational identity development can be used as a yardstick for overall identity formation (as in the Marcia studies). For example, many of the subjects who are experiencing more severe identity problems do not regard choosing a vocation to be a major problem and a few seem to have more-or-less resolved this issue. The results also suggest that finding a suitable vocation is of little concern to many of the early adolescents in this study and that it only becomes important later on. This suggests that vocational identity may become increasingly important with age.

Douvan & Adelson (1966) contend that vocational identity plays a more central role in the identity formation of boys than of girls, while Hershenson (1967) found that value orientations influence the relationship between vocational identity and overall identity in college males.

Vocational identity may have a different function for subjects who foreclose their identity development than for those who establish as autonomous sense of identity. But the data obtained in this study proved too superficial to throw any light on these questions.

8. Analysis of the Value Judgements Scale.

Overall response patterns: The number of times each of the four response categories was used (given in percentages) is contained in Appendix I-1. 7% of all the responses are in the first category (Not Wrong) and 19% in the second (Sometimes Wrong) but the boys use these categories more frequently than the girls and they are also used more frequently with increasing age (school standard). 11% of all responses are in the 'Wrong for Teenagers' category and the older subjects (Std 10s) tend to use this category less frequently than the Std. 8s and 6s. The vast majority of responses (63%) however, are in the last category (Wrong for Everybody) but the girls use it more frequently than the boys and it is used less frequently with increasing age.

Socioeconomic differences in overall response patterns are not marked. The lower-middle class Ss (I) tend to use the first category more frequently and the second category less frequently than subjects in the other classifications. The upper-middle class Ss use the 'Not Wrong' response least and the 'Wrong' response more often than the other Ss.

The Identity Classification differences are quite marked. The Moratorium Achievement Ss use the first (18%) and second (27%) responses more frequently than subjects in the other classifications and they only use the 'Wrong' response 45% of the time. The ?Fore-closed and Foreclosed Ss seldom use the 'Not Wrong' response and the latter group used the 'Wrong' category 77% of the time. The ?Fore-closed Ss use the 'Wrong for Teenagers' response more frequently (21%) than other subjects and the Pre-Moratorium Ss use the 'Not Wrong' category relatively often (13%).

Item analysis:

For the item analysis the same procedure was used as for the Problems Scale items, i.e., the responses were weighted as in the scoring procedure for the VJS and summed. This figure was then divided by the number of subjects in the group and multiplied by 100 so that the resultant "scores" are comparable across groups. Low 'scores' reflect more permissive attitudes and the maximum 'score' is 200.

TABLE 3.20: Total sample (N=166): Overall 'Scores' for each VJS item in rank order and the Frequency Distribution of responses in each response category.

<u>Item.</u>	<u>'Score'</u>	<u>Frequency Distribution (N=166)</u>			
		<u>Not Wrong.</u>	<u>Sometimes.</u>	<u>Teenagers.</u>	<u>Wrong.</u>
a. Drinking	123	21	53	32	60
b. Smoking	125	24	37	39	65
e. Gambling	146	16	38	20	92
c. Lying	171	3	40	2	121
f. Drugs	184	1	12	12	141

The above table shows that Drinking and Smoking are only considered 'Wrong' by about a third of the subjects in this sample but Lying, Drug taking and Stealing are considered 'Wrong' by the majority of the subjects. Lying is considered 'Sometimes Wrong' by about 25% of this sample.

TABLE 3.21: Age and Sex Differences in the VJS Item 'Scores'.

<u>Item.</u>	<u>Males.</u>	<u>Females.</u>	<u>Std.6s.</u>	<u>Std.8s</u>	<u>Std.10s</u>
a. Drinking	117	134	147	122	100
b. Smoking	120	131	158	120	93
e. Gambling	133	166	168	146	123
c. Lying	166	178	173	174	167
f. Drugs	179	192	192	182	179
d. Stealing	194	198	197	198	193

The analysis of variance for sex differences in VJS mean scores was significant: $F(1/148) = 6.14$; and Table 3.21 shows that the girls obtain higher 'scores' on all the items but the greatest difference is for Gambling (33 points) and the difference for Stealing (4 points) is too small to be significant. A significant amount of variance was also found between the VJS School Standard mean scores ($F = 2/148 = 9.31$) with the Std. 6 mean score differing significantly from the Std. 8 and Std. 10 mean scores. Table 3.21 shows that the 'scores' decrease with age for all the items but the differences are most marked for Smoking. The 'scores' for Lying, Drugs and Stealing do not decrease very much.

TABLE 3.22: Socioeconomic Differences in VJS Item 'Scores'.

<u>Item.</u>	<u>I.</u>	<u>II.</u>	<u>III.</u>
a. Drinking	127	115	126
b. Smoking	140	126	110
e. Gambling	151	141	144
c. Lying	181	161	169
f. Drugs	186	185	182
d. Stealing	197	198	193

Although no significant differences were found between the three socioeconomic categories for VJS total scores ($F(2/145) = 2.84$), the above table suggests that there might be differences in attitudes towards Smoking: the lower-middle class (III) Ss obtain a 'score' which is 30 points lower than that of the upper-middle class (I) Ss. The category I Ss tend to get the highest 'scores' on all items but the differences are not very marked for the remaining five items.

TABLE 3-23: Identity Classification Differences in VJS Item 'Scores' and in VJS Total scores.

<u>Item</u>	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>?Fore.</u>	<u>Fore.</u>	<u>Pre-M.</u>
a. Drinking	78	122	111	100	148	140
b. Smoking	72	130	128	129	139	130
e. Gambling	100	150	133	186	171	110
c. Lying	156	166	156	171	194	140
f. Drugs	178	184	189	200	194	160
d. Stealing	183	198	194	200	196	200
VJS Mean:	7.7	9.5	9.2		10.4	8.8
S.D.:	2.2	1.7	1.6		1.5	2.4

Identity Classification differences: A one-way analysis of variance was conducted to test differences between the mean VJS scores for each Identity Classification (Appendix I-2). $F(4/149) = 8.82$ which is significant at beyond the .05 level, and the mean score for the Moratorium→Achievement Ss was found to be significantly different from the mean scores for the Moratorium Ss and the Foreclosed Ss.

The Moratorium→Achievement Ss obtain the lowest 'scores' on all items except Lying and Drugs. It is interesting that the Pre-Moratorium Ss obtain the lowest 'scores' on these two items. The Foreclosed Ss obtain relatively high 'scores' on all items but the ?Foreclosed Ss obtain the highest score for Gambling. The latter group obtain high 'scores' on all items except Drinking (which is relatively low) and Smoking but they are slightly more tolerant toward Lying than the Foreclosed Ss.

It is attitudes towards Drinking, Smoking and Gambling and Lying which differ most between the Identity Classifications while almost all the subjects condemn Drug-taking and Stealing outright.

Discussion:

By and large the results of this analysis confirm expectations although some may be surprized that in this "permissive age" the VJS scores are so high! The findings are similar to those obtained by Wright & Cox (1969) for a large sample of 16 to 18 year-old high school pupils. They also found that the girls tended to be more severe in their judgements than the boys.

The overall response patterns show that the 'Wrong for Teenagers' category is used relatively infrequently throughout which suggests that most adolescents do not conceive of a 'double standard' for adults and teenagers. The item analyses show that most of the variance in the VJS scores involves differences in attitudes towards Drinking, Smoking (which showed the most marked age decrease), Gambling (particularly in sex differences), and to a lesser extent in attitudes towards Lying. There is also a suggestion that attitudes towards Smoking may differ according to social class. Taking drugs and Stealing, however, are almost universally condemned by the subjects in this sample.

Increasing tolerance or permissiveness in these attitudes seems to be a function of increasing age and identity development. But there does not seem to be any relationship between the identity vs. identity confusion continuum (adjustment) and VJS attitudes. The age trends may also reflect a shift from parental values to peer group values. But though the Foreclosed Ss tend to be more severe in their judgements than subjects in the moratorium categories, VJS scores were also found to decrease with age for the Foreclosed Ss (mainly for the girls).

One of the reasons for including the Value Judgements Scale in this study was to help identify anti-social negative-identity types but none of these emerged in this sample. The only subject who was classified as a Negative-Identity obtains a relatively low VJS score (6) but he simply marked all the items 'Sometimes Wrong'. Two of the Pre-Moratorium Ss (the two oldest boys in this group) obtain low scores on the VJS (see Appendix C-4, Table 7) and one wonders whether they may be potential Negative-Identities.

9. Value Patterns.

In the analysis of the Values Questionnaire responses only the rankings were analysed as the ratings had been found to give almost the same information in the pilot study. Firstly, the median rank for each item in the questionnaire was computed for each of the various sub-groups. Secondly, the responses to the Values Questionnaire were analysed so as to identify basic patterns of values and investigate their relationship with identity formation.

TABLE 3.24: Median Ranks for the Total Sample and the Frequency Distribution of the Ranking Responses.

<u>Item.</u>	<u>Median Rank.</u>	<u>Frequency Distribution. (N = 162).</u>			
		<u>1 - 3.</u>	<u>4 - 6.</u>	<u>7 - 9.</u>	<u>10 - 12.</u>
a. Academic.	2.27	<u>111</u>	33	13	5
e. Sport.	4.9	<u>66</u>	42	33	21
l. Appearance.	5.0	47	<u>62</u>	37	16
k. Family.	5.22	<u>57</u>	40	43	22
b. Social	5.8	41	<u>61</u>	38	22
i. Friends.	5.83	25	<u>76</u>	43	18
f. Religion.	6.43	<u>49</u>	34	33	46
j. Charity.	7.3	27	42	<u>56</u>	37
g. Dating.	7.3	29	39	<u>50</u>	44
c. Hobbies.	8.0	17	31	<u>71</u>	43
d. Art.	9.8	14	19	44	<u>85</u>
h. Politics.	11.7	3	8	24	<u>127</u>

Academic achievement (a) is ranked first by 36% (N = 59) of the total sample followed by Sport (e) and Religion (f) which are ranked first by 14% (N = 23) each and Family (k) is ranked first by 10% (N = 16) of the total sample. Thus these four items account for 75% of the no. 1 ranks. Politics (h) and Art (d) are only ranked first by one subject.

Being with the family (k) decreases in importance quite markedly with age. It remains relatively more important for the girls than for the boys, and is still very important for Std. 8 females (3.27) but drops to 7.35 for the Std. 10 girls (see Appendix J-1 Table 1). The importance of religion (f) also decreases markedly with age and it tends to be more important for the girls than for the boys. Helping other people (j) is ranked quite high by the Std. 6 girls (4.6) and Std. 8 girls (5.35) but its importance tends to decrease with age and in general it is not considered very important by the boys. The importance of academic achievement (a) decreases very slightly with age but more particularly for the male subjects so that it takes second place to Sport (e) for the Std. 10 boys.

Having a good time socially (b) increases markedly in importance with age for both males and females, and so does dating (g). An interesting finding is the absence of differences between the boys and girls for these items and for having lots of friends (i). Appearance (l) is relatively more important for the girls than for the boys.

Hobbies (c) and artistic activities (d) are relatively unimportant for the majority of the subjects while politics (h) is completely unimportant for all but a very small minority.

Socioeconomic differences: The median ranks for each item for each of the three socioeconomic classifications are presented in Appendix J-1, Table 2. There are no marked differences for any of the items. This finding is not altogether unexpected as the socioeconomic range only covers the middle class.

Identity classifications: The median ranks for each of the Identity classification groups are presented in Appendix J-1, Table 3. The median ranks of the two largest groups (Foreclosure and Moratorium) are similar and resemble the ranks of the Std. 6. subjects. Achievement (Academic, (a) and Sporting (e), Appearance (1), Being with the Family (k) and Religion (f) are the most important values for these groups. In contrast, the Moratorium-Achievement group (which consists mainly of Std. 10 males) endorse achievement and social values* while Family (k) and Religion (f) are relatively unimportant (8.1 and 9.2 respectively). Dating (g) is more important (4.43) for this group than for any of the others (ranges from 7.43 to 10.1).

Value Patterns:

The subjects were divided according to which of the following items are ranked in the first three positions: Academic (a), Sport (e), and Social (b) and/or Dating (g). This resulted in eight groups. The rankings of subjects within each group were then compared in order to determine whether there was a basic pattern in each group. Attention was given to the first four ranks and a fairly distinct pattern was evident in each of seven groups. These patterns are presented in Table 3.27. Subjects who rank any of the above items fourth were classified according to the pattern which they fitted best.

Other methods of classification were also tried. The responses of the subjects who rank Religion (f) in the first four positions were studied but there were no distinct patterns among this group.

* 'Social values' in this paper refer to 'having a good time and having lots of friends' rather than to concern about socio-political issues.

TABLE 3.27: Value Patterns

<u>I(a) Academic (N=48)</u>		<u>I(b) Academic-Sport. (N=34)</u>		<u>II Academic-Social. (N=21)</u>	
<u>Item.</u>	<u>Median.</u>	<u>Item.</u>	<u>Median.</u>	<u>Item.</u>	<u>Median.</u>
a. Academic	1.7	a. Academic	1.7	a. Academic	1.5
k. Family	2.75	e. Sport	2.2	b. Social	2.85
f. Religion	3.5	l. Appearance	5.1	g. Dating	3.6
j. Charity	4.45	i. Friends	5.4	l. Appearance	5.4
l. Appearance	4.8	k. Family	5.6	i. Appearance	5.6
	85%		77%		81%

<u>III(a) Social (N=7+2) **</u>		<u>III(b) Sport-Social (N=13+1)</u>	
<u>Item.</u>	<u>Median.</u>	<u>Item.</u>	<u>Median.</u>
l. Appearance.	2.1	e. Sport	1.4
b. Social	2.85	g. Dating	2.85
g. Dating	2.85	b. Social	3.3
i. Friends	4.67	i. Friends	4.85
	79%		81%

<u>IV(a) Mixed (N=11)</u>		<u>IV(b) Sport-Mixed (N=10+1)</u>		<u>IV(c) Religion (N=8)</u>	
<u>Item.</u>	<u>Median.</u>	<u>Item.</u>	<u>Median.</u>	<u>Item.</u>	<u>Median.</u>
a. Academic	1.85	e. Sport	1.6	f. Religion	1.6
e. Sport	2.7	l. Appearance	4.1	k. Family	2.35
b. Social	3.0	i. Friends	5.6	j. Charity	3.35
i. Friends	5.85	a. Academic	5.6	l. Appearance	3.6
g. Dating	5.85			i. Friends	4.1
	86%		52%		94%

*

The five items given for this pattern account for 85% of the variance in the first four ranks of the subjects classified in pattern I(a).

**

This means that nine subjects responded according to this pattern but the responses of two were not included in the item analysis because they did not rank the items correctly.

Similarly there were no distinct patterns in the responses of the subjects who rank Politics (h) in the first four, or Academic (a) in the last four, or Social (b) and Dating (g) in the last four.

Two modal patterns emerge: I(a) Academic and I(b) Academic-Sport.

31% of the subjects were classified according to I(a) and 22% according to I(b). The detailed results are presented in Appendix J-2. A survey of the eight value patterns in Table shows that several items do not appear to be important in any of the patterns. Art (d) is ranked in the first four positions by 22 of the subjects and ten of these respond according to pattern I(a) and four according to pattern IV(b).

On the whole Art obtains very low median ranks except for pattern III(a) - 7.4 Hobbies (c) is ranked in the first four by 26 subjects and usually by those subjects who respond according to the main patterns: 9 for I(b), 6 for I(a) and 5 for II. This item obtains median ranks ranging from 7.53 to 8.85. Politics (h) is ranked in the first four by only 5 subjects and there is no consistent pattern among the responses of these subjects.

It should also be noted that two items appear in almost every pattern: Appearance (l) and Friends (i) although they are not often ranked in the first four positions. It is possible that these items have different connotations to different people. The patterns discriminate best for seven items: Academic (a), Family (k), Religion (f), Sport (e), Charity (j), Social (b) and Dating (g).

Sex differences: (Appendix J-2, Table 2): The patterns where sport is of major importance - I(b), III(b) and IV(a) - are endorsed mainly by the boys as would be expected. The highest proportion of boys (27%) endorse I(b) Academic-Sport while 23% of the boys' responses fit I(a)

Academic. 44% of the girls endorse I(a) and 18% fit pattern II (Academic-Social)).

Age trends: (Appendix J-2, Table 2): The number of subjects who respond according to pattern I(a) tend to decrease markedly with age: 52% of these subjects are Std. 6s. The number of subjects endorsing the more socially-oriented patterns, especially III(a) and III(b), tends to increase with age as would be expected from the general results in the preceding section. On the whole, the responses of the Std. 10s are more varied than those of the younger subjects.

Identity Classification differences (Appendix J-2, Table 3): The most significant finding is that the greatest proportion of Foreclosed Ss (46%) endorse pattern I(a) and that half of the subjects who endorse this pattern are classified as Foreclosed. 19% of the Foreclosed Ss respond according to pattern I(b) and 15% according to pattern II. These three dominant patterns, which are all academically oriented, account for 80% of the Foreclosed Ss responses and for the responses of six of the seven ?Foreclosed Ss. None of the Foreclosed or ?Foreclosed subjects endorsed the rather atypical, socially oriented pattern III(a).

In contrast, the value patterns of the Moratorium→Achievement Ss are much more varied and only 33% respond according to the two modal patterns : I(a) and I(b). But none of these subjects endorse pattern II or IV(c).

28% of the Moratorium Ss respond according to pattern I(a) but these are mainly the younger subjects. 24% endorse pattern I(b) and the remainder (48%) are fairly equally distributed across the other six patterns. The value patterns of the Moratorium→Confusion Ss tend to be varied but a third of these subjects endorse pattern II while less than a third respond according to the two modal patterns. The greatest proportion of Pre-moratorium Ss (40%) endorse pattern I(b).

Discussion:

The majority of subjects in this sample regard academic achievement (a) as being very important (69% rank this item in the first three positions) and this is in line with the findings reported by Gold & Douvan (1969). This may account to a large extent for the finding that school work frequently causes concern. The above authors also quote studies which show that sporting achievement is often more highly valued than academic achievement by high school boys. The results of this study do not altogether agree with this: Sport (a) is important to the boys in this sample and it becomes more so with age but it is only in Std. 10 that the boys actually obtain a higher median rank for sport (2.85) than for academic achievement (3.4).

Girls have been found to be more socially oriented than boys (Douvan & Adelson, 1966) but no differences were found for the social items (l, b, i and g). This may be partly due to the wording of these items. The Problems Scale analysis did show that girls are more concerned about peer relations (item 2) than boys, and helping others (item j) is considered to be quite important by the Std. 6. and 8 girls. This item is seldom ranked as important by the boys. The girls rank 'Clothes and your appearance' (l) slightly higher than the boys do and

physical appearance (item 6 on the Problems Scale) also causes greater concern among the girls. But item 1 (appearance) is accorded considerable importance by most of the subjects throughout adolescence (by many of the Foreclosed Ss as well).

There are fairly marked shifts with increasing age in the values of these subjects. Religion (f) and 'Being with the family' (k) are considered very important by the Std. 6s and decrease in importance markedly by Std. 10. Helping others (j) also decreases in importance to a certain extent. The items which increase in importance are 'Having a good time socially' (b), 'Having (or making) lots of friends' (i) and Dating (g).

The decrease in importance of 'Being with the Family' may reflect an increase in independence or a desire for independence from the family. It is important for most of the Foreclosed Ss (median rank = 4.1) but it is relatively unimportant for the Moratorium→Achievement Ss (8.1). The Moratorium→Confusion Ss also rank this item low (8.2) but many of them reported problems with their parents (and with siblings). In contrast, the ?Foreclosed Ss, who are also experiencing confusion, consider Family (k) important (3.5) and they reported few problems with parents.

It is generally held that interest in the opposite sex increases during adolescence and the Dating (g) results support this. But the age trends noted in the values data seem to indicate a shift from parental values to more socially-oriented peer group values although the data also suggests a shift from more conventional and stereotyped

value responses to more varied value patterns. 68% of the Std. 6s endorse patterns I(a) and I(b) while only 36% of the Std. 10s respond according to these two conventional patterns. But it is the responses of the subjects who are consolidating their identities (Moratorium → Achievement) which show the greatest amount of variation and are almost equally distributed across six of the value patterns identified in this study. These findings confirm our theoretical expectations: the shift from parental values to peer group values helps the adolescent to break his ties with the family, and then he goes on to establish his own set of values which is compatible with his developing sense of identity.

Theoretically, the subjects who foreclose their identities do not establish their independence and their values should remain conventional and stereotyped. The majority of the Foreclosed Ss (65%) respond according to patterns I(a) and I(b) but there also appears to be a shift with age in the values of these subjects. In general, the greatest shift is away from pattern I(a) which seems to embody parental and school values (it includes religion, being with the family and helping others). Almost all (80%) the Std. 6s classified as Foreclosed respond according to I(a) but very few (13%) of the Std. 8s and 35% of the Std. 10s do.

This raises the question of whether this shift in values of the Foreclosed Ss (their F-Scale and VJS scores were also found to decrease slightly with age) reflects a significant personality development or not. This question can only be resolved by further research but a possible explanation is that subjects who foreclose their identities shift their dependency needs from their parents to their peers during adolescence

and therefore have to change their values so that they conform more to the changing values of their peers who are developing autonomous identities.

There is a considerable amount of pressure on adolescents to become less dependent on their families and transferring dependency needs to peers is one method of coping with this. But while the moratorium subjects use this method as a means for developing independence, the foreclosed subjects use it as a defense mechanism. In fact the disparity which arises between parental and peer values in middle adolescence may cause a certain amount of conflict in dependent individuals and this could account for the fact that 'moral' issues (item 15 of the Problems Scale) is checked as a problem by quite a number of Foreclosed Ss.

The values of the Foreclosed Ss resemble those of the Foreclosed Ss most closely and they also consider 'Being with the Family' (k) to be very important. This fits in with the previous suggestion that these subjects are basically dependent and accepting of authority and conventional values even though they may be experiencing fairly severe identity problems.

The ValuesScale does not discriminate very well between the Moratorium and Foreclosed Ss but the former endorse pattern I(a) much less frequently than the latter and the value patterns of the Moratorium Ss tend to be more varied. The values of the Moratorium → Confusion Ss differ from the Moratorium Ss in that they rank Family (k) as fairly unimportant and their values tend to be less conventional. A third of them respond according to pattern II which attempts to combine

academic achievement with a social orientation. This may not be very realistic and it is interesting to note that none of the Moratorium→Achievement Ss endorse this pattern.

Erikson contends that ideology is very important in adolescence because it provides a framework for identity formation. Thus Marcia (1966) used religious and political ideas as an index for classifying subjects according to different types and stages in identity development. The results of the present study and others (Gold & Douvan, 1969; Mogar, 1964) raise doubts about whether these traditional sources of ideology are in fact effective forces in the lives of modern youth and, therefore, whether they would provide valid indices of identity development. Politics (h) is considered unimportant by the vast majority of the subjects in this sample; and although Religion (f) is considered important by about a third of these subjects (mainly by the Std. 6s), it diminishes in importance considerably during the adolescent period and without causing much concern (Problems Scale results). One wonders whether many of those who rank Religion (f) as important are not simply paying lip service to parental values. Gold & Douvan (1969) conclude that: " most adolescents' relationships to their religion are similar to most of their relationships with their grandmothers: both come with the family and are supposed to be respected on account of their age, but neither is really stimulating or relevant." (p. 319)

10. Rating Scales

The rating scales were included to obtain very rough indices of variables which one would expect to be related to identity formation but which do not appear to be critical factors. No detailed analysis of the responses on these ratings scales will be undertaken because the measurements are too gross to differentiate adequately among individual subjects. The main object is to determine whether these variables do seem to be related to identity formation and whether such relationships might be worth further investigation.

Elation-Depression:

A six-point rating scale with level 1 reflecting severe depression and level 6 reflecting elation was designed. Subjects were required to check the statement which described the way they generally feel (most of the time) and the statement which described the way they were feeling at the time of testing (now). The 'general' responses and the 'now' responses have been analysed separately (see Appendix K-1).

The vast majority of 'general' responses are at level 4 (Feel pretty good. O.K.) and level 5 (Feel very good and cheerful.), and no subjects check levels 1 and 2. A consistent trend is that the 'now' responses are more depressed (or less elated) than the 'general' responses: the greatest proportion of 'now' responses (36%) are still at level 4 but 28% check level 3 (Feel a little bit down. Just so-so.) and 6% check levels 1 and 1 (see Appendix K-1, Table 1). The median ratings for the total sample are 4.6 (general) and 4.0 (now).

Only 11% of the total sample check the same level for both their responses. In the majority of cases (47%), the 'now' response is one level lower than the 'general' response; for 13% it is two levels lower, but a discrepancy of 3 levels or more (with 'now' lower) only occurs in 4% of the cases. Some subjects do rate 'now' better than 'general': for 17% the 'now' response is one level higher but it is only two or more levels higher for 2% of the subjects. These findings suggest that the 'general' responses may be slightly inflated unless filling in these questionnaires has a generally depressing effect (one might expect this in some cases).

The median ratings for sex and standard sub-groups are as follows:

	<u>Males.</u>	<u>Females.</u>	<u>Std. 6.</u>	<u>Std. 8.</u>	<u>Std. 10.</u>
'General'	4.6	4.5	4.6	4.4	4.7
'Now'	4.0	3.9	4.0	3.9	4.0

The frequency distributions are given in Appendix K-1, Table 1.

There are no obvious sex differences although the 'now' responses of the females tend to be more widely distributed and the females check levels 1 and 2 slightly more frequently. There are no marked age (std.) differences either.

The frequency distributions for the Identity Classifications are given in Appendix K-1, Table 2 and the median ratings are as follows:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
'General'	4.8	4.5	4.3	4.8	4.2
'Now'	4.2	4.0	3.4	4.1	4.6

There are no sex or standard (age) differences in the median ratings on this scale: males = 2.3, females = 2.3; Std. 6 = 2.3, Std. 8 = 2.4, and Std. 10 = 2.3 (the frequency distributions are presented in Appendix K-2, Table 1). But the Moratorium→Achievement Ss tend to experience the greatest stability in their moods and the Moratorium→Confusion Ss the least. The median ratings for the Identity Classifications are as follows:

<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
2.1	2.3	3.3	2.3	2.3

The frequency distributions for the Identity Classifications are given in Appendix K-2, Table 2, and although the results confirm theoretical expectations, these findings suggest that there is no close relationship between mood stability vs. variability and identity vs. identity confusion. But one should not rule out the possibility that a more sensitive measure of mood variability would find greater differences.

Parent-Child Communication:

Level 1 of this rating scale reflects very poor communication and level 5 very good communication with parents from the subject's point of view. The degree of communication between the subject and each of his parents was obtained and the data is analysed separately for mothers and fathers.

Table 1 in Appendix K-3 shows that the girls tend to communicate better with their mothers (median rating = 4.3) than with their fathers (3.6) but there is no overall difference for the boys (median rating = 3.9 in both cases). Nevertheless, the data suggests that for boys the degree of communication with father may decrease with age.

	<u>Males</u>			<u>Females</u>		
	<u>Std.6.</u>	<u>Std.8.</u>	<u>Std.10.</u>	<u>Std.6.</u>	<u>Std.8.</u>	<u>Std.10.</u>
Father:	4.1	3.9	3.6	3.6	3.7	3.6
Mother:	3.9	3.8	3.8	4.3	4.2	4.4

On the whole, the findings suggest that parent-child communication is relatively good and that problems in communication are more likely to occur with the opposite-sexed parent except among the oldest boys (Std. 10) where poor communication with father is more frequently reported than with mother.

Table 2 in Appendix K-3 shows the percentage of subjects who report better communication with their fathers than with their mothers, the same for both parents, and better communication with mothers. These findings support the above conclusions. In Std. 6 and 8 more boys report better communication with their fathers but in Std. 10 slightly more report better communication with their mothers. The majority of girls in each age group report better communication with their mothers and relatively few girls report that they can communicate better with their fathers than with their mothers.

The frequency distributions of responses for the Identity Classifications are given in Appendix K-3, Table 3. The median ratings are as follows:

		<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
Father:	Males.	3.4	4.2	3.0	4.1	4.3
	Females	3.8	3.4	3.2	3.9	(4.0)
	Total.	3.6	3.9	3.1	4.0	4.2
Mother:	Males.	3.6	3.9	2.8	4.3	3.8
	Females.	4.8	4.2	4.1	4.3	(5.0)
	Total.	4.0	4.1	3.5	4.3	3.9

For the Moratorium→Achievement males the degree of communication with both parents is often fairly limited but more of these boys communicate better with their fathers (46%) than with their mothers (31% communicate better with their mothers - Appendix K-3, Table 4). The Moratorium→Achievement girls tend to communicate fairly well with both parents but most of them communicate better with their mothers.

For the Moratorium Ss communication tends to be better with the like-sexed parent and parent-child communication is quite good on the whole. For the Moratorium→Confusion boys the degree of communication tends to be limited with one or both parents - none of these subjects report good communication with both parents (see Appendix C-4, Table 4) but the majority (55%) report better communication with their mothers than with their fathers. For the Moratorium→Confusion girls communication problems are mainly with fathers (none report better communication with their fathers than with their mothers).

The Moratorium→Confusion Ss tend to report communication problems more frequently than subjects in any of the other categories and they also reported problems with their parents (Problems Scale, item 5) most frequently. Although the communication between the

Moratorium→Achievement Ss and their parents does not seem to be very good on the whole, this group did not report very many problems with their parents.

The Foreclosed Ss generally report good communication with both parents and they also reported very few problems with their parents. These subjects report the same degree of communication with both parents more frequently than subjects in the other categories (except Pre-Moratorium) but relatively few of the Foreclosed boys and girls communicate better with their fathers than with their mothers (see Appendix K-3, Table 4).

The above findings are difficult to evaluate and the relationship between parent-child relations and identity formation will have to be more thoroughly investigated before generalizations can be made. But we can make a few tentative suggestions. For the girls difficulties in communicating with father seem to be fairly closely related to identity problems. For the boys identity problems seem to be related to poor communication with either or both parents but more particularly with father: the Moratorium→Achievement and Moratorium boys more frequently report better communication with their fathers than with their mothers but the reverse has been found for the Moratorium→Confusion boys. It may also be significant that only 13% of the Foreclosed boys report better communication with their fathers than with their mothers.

On the whole most adolescents in this population seem to be able to communicate reasonably well with their parents despite the so-called generation gap. Nevertheless, there seems to be a communication gap for some of the Moratorium→Achievement Ss (effect of identity development?) and for most of the Moratorium→Confusion Ss. In the latter case poor communication with parents may be a cause or an effect of identity problems.

Peer Relations:

This 'scale' consists of five statements which do not really reflect a continuum and so the analysis is confined to frequency distributions (presented in Appendix K-4). Most of the subjects check 5 (I have lots of friends) and 3 (I have a few close friends.) although few Std. 6. girls check 5. The Std. 8 boys check 4 (I belong to a special group or crowd) more frequently than the other statements but relatively few other subjects check this item. Only 14% of the total sample check 2 (I have friends but no really close friends) and only 2 subjects check 1 (I am a lone wolf).

The distribution of responses in each Identity Classification is as follows:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
5.	39%	33%	19%	31%	40%
4.	17%	15%	19%	15%	20%
3.	33%	37%	29%	44%	10%
2.	6%	13%	29%	10%	10%
1.	6%	-	-	-	10%

The subjects who are experiencing identity problems (Moratorium—> Confusion) consider that they have lots of friends and are popular (5) much less frequently than subjects in other categories, and they also check 2 more frequently. This group also checked peer relations (item 2, Problems Scale) as a problem more frequently than subjects in the other identity categories. According to Erikson one of the characteristics of identity confusion is social isolation and these results show that the subjects who experience some confusion tend to feel more isolated than those who are not.

Conduct:

Subjects were required to rate themselves along a five-point scale for three items:

- a. Describe your behaviour in school.
- b. What do you think your teachers think about your behaviour?
- c. Describe your behaviour at home.

Each subject's behaviour was also rated by his class teacher along the same scale. This scale was included to identify rebellious types.

The girls tend to rate themselves as better behaved at home than the boys rate themselves but the teachers do not discriminate between the sexes (see Appendix K-5, Table 1). The boys consider themselves to be 'rebels' (level 1) more frequently than the girls. There are no marked age (std) differences but the Std. 8s and 10s tend to think that their teachers consider their behaviour to be worse (b) than they do (a). In all standards the teachers (T) rate behaviour as better than self-ratings (a).

The Identity Classification frequency distributions are given in Table 2 of Appendix K-5, and the median ratings are as follows:

	<u>M→Ach.</u>	<u>Mora.</u>	<u>M→Con.</u>	<u>Fore.</u>	<u>Pre-M.</u>
(a)	3.3	3.9	3.3	4.1	3.9
(b)	3.2	3.5	3.0	4.1	3.5
(c)	3.8	3.7	3.2	4.0	3.5
(T)	4.1	3.9	4.1	4.0	4.2

The most striking difference is that the Foreclosed Ss rate their conduct higher than subjects in other categories. Inspection of the raw data also shows that Foreclosed Ss quite often give themselves higher ratings on (a) and (b) than their teachers do while subjects in the other categories seldom do this (see Appendix C-4). According to Loewinger (1966) individuals in the conformist stage of development see themselves in socially acceptable terms. Most of the Foreclosed Ss would be in this stage and this may account for their relatively high self-ratings on this scale.

The Moratorium→Achievement and Moratorium→Confusion Ss rate their behaviour lower than subjects in the other categories. It may be that good behaviour in school is perceived as a sign of submission to authority and that this accounts for their relatively low self-ratings. The Teacher ratings do not differentiate between the identity categories. The Moratorium→Confusion Ss obtain the lowest median rating (3.2) for their behaviour at home (c) which may reflect rebellion against parental control and be linked with their high parent problems score and their poor communication with their parents.

Sociogram:

The data derived from the sociograms has not been systematically analysed because it is difficult to quantify. In the raw data sheets (Appendix C-4) some of the information obtained from the sociograms has been recorded and it was taken into account when assessing individual subjects for purposes of classification.

The labels used signify the following: Popular (pop) = chosen relatively frequently; Clique (cliq) = one of three who choose each other; Mutual friends (mut) = one of two who choose each other; Unchosen (unch) = unchosen by anyone in the class; Isolate (isol) = unchosen by anyone in the class and makes no choices himself. The remaining subjects were chosen by one or two others but do not choose the same people themselves.

Physical Development:

The Physical Education teachers were asked to rate all the subjects along a five-point rating scale for physical development, but there is reason to believe that one or both of the teachers misunderstood the instructions and rated gymnastic-sporting ability and they did not make ratings for all the subjects. The ratings are recorded in the raw data sheets (Appendix C-4) but they have not been systematically analysed.

Home Background and Other Information:

Any additional information which was obtained about particular subjects concerning deaths, divorces and separations in the family is recorded in Appendix C-4, but this information could not be gathered systematically and so it has not been analysed.

The school prefects are also identified.

CONCLUSIONS

One of the major issues in adolescent psychology concerns the Sturm und Drang theory. The results of this study suggest that the majority of adolescents do not experience very many problems or serious conflicts with their parents, that the majority have fairly high self-esteem, feel cheerful most of the time and do not experience marked fluctuations in mood. But there are some (about 14%) who do report many problems and seem to be experiencing a certain amount of stress and confusion. Thus the findings support Erikson's view and other research (Douvan & Adelson, 1966; Offer et al, 1970).

But the findings of this study do not challenge Bandura's view (1969) that adolescence is no more stressful than any other period of development because it does not cover a long enough span of development to make comparisons between stages possible. In terms of Erikson's theory one would not expect those individuals who foreclose their identity development (which seems to be quite a large proportion of adolescents - 33% in this study and a similar proportion was obtained in the Marcia studies, 1966, 1967 & 1970) to experience many problems and conflicts which is supported by the findings of this study (especially the low Problems Scale scores obtained by Foreclosed subjects). But does identity development necessarily involve some degree of conflict and confusion at some stage during adolescence? The results of this study show that problems decrease with age and self-esteem increases for those who are developing their identities, but scores on a measure of identity vs. identity-confusion do not correlate with age. But this question can only be answered using a

longitudinal research design for reasons which have been spelled out elsewhere.

Another issue concerns the shift from parent to peer values and the question of parent-adolescent conflict. On all three measures which are concerned with values - the F-Scale, Value Judgements Scale, and the Values Questionnaire - marked age trends have been found.

Whether these results truly reflect a shift from parent to peer values is debatable because parent values have not been measured, but the Value Pattern results strongly suggest that this might be the case. In order to fully resolve this issue it is probably necessary to consider both actual parental values and parental values as perceived by adolescents.

The shift from parent to peer values and the development of independence is supposed to involve parent-adolescent conflict according to the psychoanalytically-oriented theorists. But the large scale empirical studies (e.g. Douvan & Adelson, 1966; Offer et al, 1970; Bandura, 1969) have not found much parent-adolescent conflict. Similarly, the adolescents in this study report relatively few problems with their parents and parent-child communication is perceived as being good by most adolescents. But many of the subjects who appear to be experiencing some confusion do report problems and poor communication with parents. Problems with parents have also been found to increase with age and for boys communication with father tends to decrease with age, which provides some support for the contention that parent-adolescent relations tend to deteriorate as independence develops. It was also found that it is the

Foreclosed Ss, those who are most authoritarian, conventional and dependent, who report problems with parents least frequently and who tend to communicate best with their parents (according to them).

The vocational plans findings show that realism in vocational plans tends to increase with age during adolescence which supports other research in the field (Gold & Douvan, 1969). Vocational choice is considered a problem by the majority of adolescents in this sample but it seems to become an issue in middle adolescence. By Std. 10. most of the boys have made a decision about their futures, but the girls tend to be more hesitant about expressing commitment to their vocational choices.

Assuming that the identity classifications are valid, the most important contribution of this study to the understanding of identity formation is the findings concerning the relationship between identity formation and the development of autonomy. Age trends were found in all measures which are related to autonomy - F-Scale scores, Janis-Field scores, Independence scores and sub-scale II of the EIS (Self-certainty vs. Self-consciousness). But it is important to distinguish between independence-dependence and self-certainty vs. self-consciousness. It is possible to be dependent and relatively self-certain which is the case for individuals who foreclose their identities. They maintain a degree of self-certainty by conforming to in-group standards instead of establishing inner controls (autonomy).

But the results suggest that real self-certainty only comes with the establishment of an autonomous sense of identity - the subjects who seem to be consolidating their identities (Moratorium → Achievement)

obtain significantly higher mean scores on EIS sub-scale II than the Foreclosed Ss and they also obtain much higher scores on the Independence items. The Moratorium→Confusion Ss obtain relatively low scores on the Independence items and very low scores on sub-scale II of the EIS and on the Janis-Field Scale. It has been inferred from this that the development of autonomy may be one of the major problems of those who experience more severe identity problems.

Waterman et al (1970) have also found that subjects classified as Identity-Achievement and Moratorium (Marcia method) obtain significantly higher scores on a measure of autonomy (Rotter Internal-External Control Scale) than subjects classified as Foreclosed and 'Identity-Diffusion'.

Other variables which have been found to be related to identity development are various adolescent problems. It was concluded that problems concerning vocational choice, money matters, physical appearance and moral issues are 'normal' concomitants of identity development while problems involving interpersonal relations (peers, family, teachers) and feelings of confusion tend to be experienced most often by those who are having more severe identity problems. Religious and sporting problems are seldom reported, while difficulties with school work seem to be a universal adolescent problem unrelated to identity formation.

The Value Patterns data suggests that values become less stereotyped and conventional as identity is developed; and the findings also suggest that attitudes towards drinking, smoking, gambling (Value Judgements Scale) may be related to identity development in some way.

Scores on the PNF I (Social Respect vs. Social Contempt) do not appear to be closely related to identity development, but they do appear to be related to psychosocial adjustment (correlate significantly with EIS scores). PNF II scores (Social Acceptance vs. Isolation) appear to be related to identity formation in boys but not in girls, while PNF III (sexual stereotypes) scores also differentiate between the Identity Classifications for both sexes.

On all the Peer Nomination Form sub-scales a marked sex difference appears in the scores for the Foreclosed Ss: the girls (especially the Std. 8s and 10s) obtain high scores (they are respected by their peers, popular and regarded as feminine) but the boys obtain relatively low scores. This has been interpreted as evidence for Marcia & Friedman's hypothesis (1970) that identity foreclosure is 'adaptive' for girls because they are not expected to develop independence. But boys who lack independence (i.e., the Foreclosed & Moratorium → Confusion males) are regarded with social contempt, are socially isolated and considered 'effeminate' by their peers. It has been suggested that independence is a concomitant of 'masculinity' in adolescence. Girls who are experiencing confusion are not necessarily regarded as maladjusted or contemptuous nor are they socially isolated, but they are considered 'tomboyish'. The latter fits Douvan & Adelson's finding (1966) that girls who express 'anti-feminine goals' tend to lack ego integration.

Douvan & Adelson (1966) have made a strong case for sex differences in identity development. ^{They suggest that development} in interpersonal relations is the focus of identity development in girls and that girls tend to keep an 'open' identity until they marry: that the establishment of an identity is

a consequence of intimacy rather than a precursor of it. The development of behavioural independence and internal controls is an important issue for boys only (and ~~that~~ this is clearly related to personality integration and heterosexual adjustment). But they also conclude that the majority of adolescents do not establish emotional independence from their families and that they restrict their development : identity 'coarctation'.

It is difficult to evaluate these findings because Douvan & Adelson do not differentiate systematically between the subjects who consolidate their identities prematurely and those who do not. If the majority consolidate their identities prematurely in order to avoid identity confusion, then the general trends which they describe must apply mainly to these subjects.

Their observation that for girls "identity is bound up not so much in what she is as in what her husband will be" is quite compatible with identity coarctation insofar as this means that an autonomous identity is not established. Their identity focusses on the roles of wife and mother, and their values, roles and self-concept will depend on the man they marry. The connotation of openness and flexibility is deluding because this seems to be incompatible with the idea of identity consolidation inherent in the concept of 'co-arctation', but it is even more erroneous to represent this type of identity formation as development - these girls do not develop an identity, they acquire one. In addition, Douvan & Adelson's description focusses on self-identity.

The findings of this study do not suggest any basic sex differences in identity development although the development of interpersonal skills was not specifically measured. The finding that PNF I and II scores do not differentiate between those girls who are experiencing some confusion and those who are not (excluding Foreclosed Ss) tends to contradict Douvan & Adelson's contention that interpersonal adjustment is the best predictor of ego integration in girls. But this may be the case for those girls who do not attempt to develop an autonomous identity.

It is not being suggested that there are no sex differences in identity formation. Girls probably are more concerned about interpersonal relations than boys (the girls in this study are more concerned about peer relations and appearance (Problems Scale), and they also tend to consider physical appearance to be more important (Values) than the boys do). It is being argued that in the basic ego processes of identity development there are no sex differences, i.e., the development of autonomy is equally important for both boys and girls.

The apparent sex difference observed by Douvan & Adelson may be a socially contrived phenomenon. If autonomous identity development is not encouraged and society expects women to conform and depend on men, then it is probably easier in the long run not to bother about independence. As Marcia & Friedman (1970) suggest, identity foreclosure is 'adaptive' for women and they probably will be relatively well-adjusted because they would not need to be defensive. In fact, the establishment of an autonomous ego identity may be even more difficult for girls than it is for boys because it may carry an even

greater risk of social disapproval for girls. Assessment of adjustment and ego integration may also be influenced by these social stereotypes.

But men are expected to be independent, to make the decisions and take the initiative (at least on the surface) and this is probably why boys tend to be more concerned about establishing behavioural independence (Douván & Adelson's finding). This would also account for the finding in this study that lack of independence in males is associated with social contempt and social isolation. As a result, these boys are probably more defensive and therefore might appear more maladjusted than their female peers who may be just as dependent. Whether the majority of males develop genuine emotional independence is another matter. 'Adjustment' in males may simply involve a show of behavioural independence.

Douván & Adelson's concept of identity 'coarctation' is probably a useful one. As it is interpreted in this study, it involves a premature consolidation (foreclosure) of identity formation during the moratorium stage before the crisis stage is reached in order to avoid identity confusion. Thus one would expect a certain amount of development to take place during the adolescent period but it will be limited.

Douván & Adelson suggest that identity coarctation is the normative solution to identity problems, and therefore one would expect that only a minority of adolescents succeed in establishing

an autonomous sense of identity. But their study only included boys up to the age of sixteen years which is not really long enough to determine whether autonomy will be established or not. Offer et al (1970) found that autonomy continued to develop right through the college years.

Only 33% of the subjects in this study have been classified as foreclosed but the classification procedure may well have excluded many (if not all) of the 'coarctation' types from being classified as foreclosed. Individuals who foreclose their identities during the moratorium stage probably fit Loevinger's (1966) conscientious stage (fifth) and they probably develop a certain degree of independence, whereas the Foreclosed Ss in this study are probably in Loevinger's fourth stage (conformist) and some may be at an even lower level of ego development. In order to identify the individuals who foreclose their identities during the moratorium stage (i.e., identity coarctation) one would need to assess the degree of ego autonomy established much more carefully than was the case in this study.

This raises the whole question of the validity of the Identity Classifications. The subjects in this study have been divided into various groups on the basis of certain criteria and on the basis of an appraisal of each subject's total configuration of scores. The statistical analysis has shown that these groups differ significantly from one another on a considerable number of dimensions. But because no external criterion was used in making the classifications one could argue that the data has been forced to fit the theoretical model. In a sense it was (insofar as each subject was classified according to only one of the categories which was defined), but it is unlikely

that any human being could contrive a system of classifying such a large quantity of data so that it yields, falsely, expected results.

Nevertheless, one can still question whether the categories do truly reflect Erikson's concepts or not. It has been stressed that it was almost impossible to assess the degree of ego integration, the degree of ego autonomy and the degree of confusion. It has been inferred that the subjects who are classified as Moratorium→Achievement are consolidating their identities but it cannot be said with certainty that their identities are autonomous.

At best, it can be concluded that reasonably consistent patterns have been identified in the data and that these patterns do confirm expectations derived from Erikson's theory of psychosocial development.

Only one other consistent pattern was found in the data which does not fit any of the identity categories, namely, the seven subjects classified as 'Foreclosed'. These subjects obtain very high F-Scale scores and they also endorse the same value patterns as the Foreclosed Ss, but they report many problems, including feelings of confusion, have low self-esteem and tend to obtain low EIS scores which suggests that they are experiencing some identity confusion. These subjects also obtain a very low mean score on the Independence items.

The results suggest that they are dependent and conforming but it is not possible to infer from the data whether they are trying to establish their independence or not. It is possible that in a minority of cases, conformity does not succeed in warding off confusion.

It has also been found that some of the older boys classified as Pre-Moratorium may be misclassified, and it has been suggested that they may be potential negative identities. On the other hand, there may be another identity-type which they fit. Bob (1970) has suggested that 'Identity-diffusion' as defined by Marcia (1966- see Appendix A-1) may be ^a way of resolving the identity crisis. Offer et al (1970) describe a similar type: the 'happy-go-lucky', other-directed individual, which has a connotation of openness and flexibility like the female identity described by Douvan & Adelson (1966) and may be a variant of identity coarctation, i.e., they do not develop an identity, but acquire one.

The subjects were assessed at a particular point in their lives, but the data does not allow the prediction of future development. It has already been pointed out the subjects classified as Moratorium→Confusion may either resolve their problems, remain confused or become even more confused, or they may ~~even~~ opt for a negative identity in order to avoid further confusion. Similarly, subjects who are classified as Moratorium may foreclose their identity development (coarctation) before they reach the crisis stage, and it is possible that the younger subjects who have been classified as Foreclosed may still be in the Pre-Moratorium stage. The distinction between these two categories is fairly arbitrary because subjects who foreclose their identities in the fourth stage will be in the same stage of ego development as the subjects classified as Pre-Moratorium.

SUGGESTIONS FOR FURTHER RESEARCH:

The questionnaire method of obtaining data on identity development has serious limitations because it is difficult to assess ego processes and responses can be faked. It is also very difficult to design self-report questionnaires which will give data which is suitable for identifying a level of ego development (according to the method described by Loevinger, 1966). It might be possible to design such instruments, but the classification procedure used in this study may be more fruitful. The results, however, show that none of the variables assessed in this study can be used in isolation to make identity classifications although some measures seem to be more effective than others.

Unfortunately, the sample used does not cover a wide enough age range to yield a fair distribution of subjects in each stage of identity formation. Only two subjects have been classified as Identity-Achievement and so we do not have a picture of how subjects in this category would score on the variables included in the study. Therefore the criteria for this classification remain hypothetical but one can make inferences from the data. For instance, if the Ego Identity Scale measures the adjustment dimension (identity vs. identity confusion) then it would be unreasonable to expect subjects in this category to obtain significantly higher EIS scores than subjects in the Moratorium category (i.e., subjects who are developing their identities without experiencing too much confusion).

The classification procedure could probably be improved if a measure of autonomy which taps the development of inner controls (perhaps Rotter's scale of Internal-External control) is used. Other measures which have been designed to measure response set, such as 'defensiveness' and 'social desirability', may also be useful in identifying the stage of development (Loevinger, 1966).

Interesting results should be obtained if an attempt is made to identify the level of ego development (stage) in subjects who foreclose their identities and an attempt should be made to identify the co-arctation type.

The development of identity along the identity vs. identity confusion dimension could be investigated using a longitudinal design, and the results of this study suggest that identity development is a long process and that future developmental studies should, therefore, cover a much wider age range than that covered by this sample (roughly, thirteen to nineteen years).

The relationship between parent-child conflict and identity formation also requires a more intensive investigation. The results of this study suggest that a poor relationship with father may be related to identity confusion in both boys and girls. It might be hypothesized that the development of an autonomous identity is facilitated by identification with father because he is more likely to provide a model of independence than mother. Over-identification with mother may encourage dependency in both sexes.

Although no marked socio-economic differences were found in this study, the range of socio-economic background was limited, and the influence of socio-economic status on identity formation may be worth further investigation. The data obtained in this study suggests that this influence may increase with age. Downward mobility has also been found to be related to identity problems (Cohen & Miller, 1969; Douvan & Adelson, 1966). The relationship between vocational-identity and overall identity development also requires further investigation.

An indirect finding of this study suggests that there are sex differences in response patterns on the peer nomination form which could have important implications for the use of this technique. But this is a complex issue which requires careful investigation.

The development of a sense of identity in adolescence is extremely complex and requires more empirical research on all levels. This study has served to clarify some of the issues and it has explored a method for investigating identity formation in large samples but this method needs further development and refinement in order to make the classification procedure more objective.

SUMMARY.

The overall objective of this study was to investigate the development of certain aspects of personality in a sample of normal adolescents within the framework of Erikson's theory of identity formation.

Theoretical framework: Erikson's life and work have been reviewed from a historical perspective in order to show how his concept of identity originated and how it has developed over the past three decades. A sense of identity is extremely difficult to define and an attempt has been made to describe it in all its complexity. A distinction was made between 'personal identity' (I-ness) and 'ego identity' (the style of one's individuality). The latter can be better understood if it is considered in terms of the conscious aspect (self-identity) and the unconscious aspect (ego-identity). The former refers to the self-concept, roles and values while the latter refers to the organization and integration of the ego.

The development of a sense of identity begins in infancy and the contribution of each stage to identity formation has been discussed:

Stage I: Mutual recognition vs. Autistic isolation;
 Stage II: The will to be oneself vs. Self-doubt;
 Stage III: Anticipation of roles vs. Role inhibition;
 Stage IV: Identification with tasks vs. Sense of futility.

But it is in stage V that Identity vs. Identity confusion becomes the dominant issue in psychosocial development. Various aspects of this conflict derive from the earlier stages of development while others "anticipate future development":

- V-1: Time perspective vs. Time confusion;
- V-2: Self-certainty vs. Self-consciousness;
- V-3: Role experimentation vs. Role fixation;
- V-4: Apprenticeship vs. Work paralysis;
- V-6: Polarization of sexual differences vs. Bisexual confusion;
- V-7: Leadership and followership vs. Authority confusion;
- V-8: Ideological commitment vs. Confusion of values.

Adolescence is a moratorium: a period of delay between childhood and adulthood which allows the individual opportunities for experimentation and preparation so that he can develop his identity within the broader framework of society (in contrast to the childhood milieu of the family and school). Identity formation involves a differentiation of parts and ego re-organization, and it is usually an unconscious process according to Erikson. Blos's formulation of 'character formation' (1962, 1968) is useful in understanding the complexities of adolescent development.

The establishment of secondary ego autonomy, which involves overcoming dependency needs, was considered a major issue in identity development during adolescence although Erikson does not give this matter very much attention. A number of writers (e.g., Douvan & Adelson, 1966; Loevinger, 1966; Friedenberg, 1963; Fromm, 1950; Searles, 1966) suggest that many people never develop genuine emotional independence. The problems involved in establishing ego autonomy have been analysed and it was concluded that this may well be one of the adolescent's major problems.

This led to a discussion of various types of identity formation:

- (1) An autonomous ego identity is the product of healthy ego development.

(2) Identity confusion is the result of ego disintegration during adolescence, although many individuals will show some confusion.

(3) Negative identity is a socially deviant type of identity.

It involves a total realignment at a more primitive level of ego integration (regression) when identity problems become too difficult to resolve positively.

(4) Foreclosed (defensive) identity is a premature consolidation of identity formation and a fixation of ego development which is an attempt to ward off anxiety.

It has been suggested that the type of negative identity or foreclosed identity will depend on the level of ego development (stage) to which the individual has regressed (negative) or at which development has become fixated (foreclosure). Douvan & Adelson (1966) contend that the majority of adolescents foreclose their identity development during the moratorium stage before the crisis stage (turning-point) is reached in late adolescence. They have called this type 'identity coarctation'.

Research Design: The rather limited number of empirical studies concerned with Erikson's concept of identity were reviewed. Most of these use extremely narrow operational definitions of identity and their results are not very meaningful. Marcia and his colleagues (1966, 1967, 1970) have shown that the most fruitful approach to research in this field is to classify subjects according to the different types of identity formation outlined above.

This study used a cross-sectional design and obtained information on a large number of variables from a sample of high school pupils (boys and girls) using the questionnaire technique. The data obtained

was then used to classify each subject according to ^{end of} six types and stages of identity formation:

- (1) Pre-Moratorium (Ss still in the previous (4th) stage);
- (2) Moratorium (the experimental stage);
- (3) Identity-Achievement (successful resolution of identity conflict);
- (4) Identity-Confusion (unsuccessful resolution of identity conflict);
- (5) Negative-Identity (socially deviant resolution);
- (6) Foreclosed (premature consolidation of identity development).

Specific criteria were laid down for each category but because of the hypothetical nature of these criteria and the doubtful validity of many of the measuring instrument, the total configuration of scores and responses for each subject was assessed in order to obtain an intuitive understanding of his psychological functioning in terms of Erikson's theory.

It is important to distinguish the two dimensions implicit in Erikson's model of psychosocial development: the hierarchical developmental (stage) dimension, and the horizontal adjustment dimension (identity vs. identity confusion). These two dimensions complicate measurement strategies and have to be taken into account in the interpretation of the results.

The measuring instruments used in this study were:

- (1) The Ego Identity Scale (EIS) devised by Rasmussen (1961) to measure some aspects of identity vs. identity confusion. It was modified in this study and consists of 66 items.
- (2) A Peer Nomination Form (PNF) consisting of three sub-scales: I Social respect vs. Social contempt; II Social acceptance vs. Social isolation; and III Masculinity/Femininity vs. Effeminateness/Tomboy.
- (3) Vocational Plans Questionnaire (VPQ) designed to provide information on 'vocational-identity'.
- (4) Problems Scale (15 items) designed to give an index of the number and intensity of typical adolescent problems experienced.

- (5) The Janis-Field Feelings of Inadequacy Scale (modified - 22 items) was used as a measure of self-esteem.
- (6) F-Scale items which measure 'authoritarian submission' and 'conventionalism' (10 items) was used to identify Foreclosed identities.
- (7) Values Questionnaire (12 items) was based on a questionnaire designed by Mogar (1964) and was used to identify value patterns.
- (8) Value Judgements Scale (6 items) was based on a scale devised by Wright & Cox (1969) to measure attitudes towards activities such as drinking, smoking, lying, drug-taking.
- (9) Rating scales to measure Elation-Depression, Mood Variability, Peer Relations, Parent-child Communication, and Conduct.
- (10) Sociogram.
- (11) Teacher ratings for Physical Development and Conduct.

All the measuring instruments were pre-tested using a sample of 54 high school pupils in Std. 6 and Std. 10. Item-analyses were conducted and some of the instruments were modified. The general procedure used in the main study involved the administration of the questionnaires in two school periods to ^{one} a class of pupils ^{at a time} in their classroom. The shorter questionnaires were administered in the first session and the EIS and PNF in the second session.

The subjects ^{were} white, English-speaking, gentile South African high school pupils at a co-educational school in a lower-middle class area. 156 Ss were included in the final sample from Std. 6 (N=56), Std. 8 (N=50) and Std. 10 (N=50). There were 95 boys and 61 girls equally distributed in each age group. The ages ranged from 12 years, 10 months to 19 years, 7 months, and they were of average and above average intelligence (mean I.Q. = 110.8). 36% came from an upper-middle class background (category I - mainly business and managerial); 27% from a middle-middle class homes (II - mainly sales and clerical); and 37% from lower-middle class homes (III - mainly artisans). Classification according to socio-economic status was based on father's occupation.

Results: Only 2 subjects could be classified as Identity-Achievement but a further 16 Ss were classified as Moratorium→Achievement because they seemed to be consolidating their identities. 49 Ss were classified as Moratorium and 19 as Moratorium→Confusion. The latter category was used for Ss who appeared to be experiencing some identity confusion but no Ss could be classified as Identity-Confusion with any certainty. Ss classified as Moratorium appeared to be forming an identity without experiencing much confusion. 52 Ss were classified as Foreclosed and 10 as Pre-Moratorium but there was doubt about the classifications of three older Ss in this group. Seven Ss did not really fit any category (? Foreclosed) but 5 were classified as Moratorium and 2 as Moratorium→Confusion. Only one subject was classified as a Negative-Identity.

A random sample of 25 male subjects was classified independently by a second judge in order to obtain some index of the reliability of the classifications (72% agreement and 20% partial agreement). This judge also classified all Ss whose classifications were queried.

In order to check the effectiveness of the classification criteria a one-way analysis of variance was conducted to test differences between mean scores for each Identity Classification. EIS, Problems Scale and Janis-Field Scale scores differentiated significantly between the Moratorium→Achievement, Moratorium and Moratorium→Confusion Ss in the expected directions. These scales also differentiated between the Foreclosed Ss and the Moratorium→Confusion Ss and the Problems Scale scores differed significantly between the Foreclosed and Moratorium Ss. F-Scale scores differentiated significantly the Foreclosed Ss from each of the other categories and

Hypothesis 3 was confirmed: EIS scores were found to correlate significantly with PNF I scores. Hypothesis 4 was confirmed: EIS scores correlated significantly with Janis-Field scores showing that identity and self-esteem are related. Hypothesis 5 was also confirmed: Problems Scale scores correlated significantly with EIS scores showing that the number of adolescent problems tends to increase as identity confusion increases. Hypothesis 6 was not confirmed: EIS scores failed to correlate with Academic Averages in any school standard, and no relationship was found between under-achievement (large discrepancy between Academic Average and I.Q.) and Identity Classification.

School standard, ~~and~~ sex differences and socio-economic differences were analysed for all the major variables, and scores on all measures were intercorrelated for the total sample, males and females, each school standard, and for the Developing Ss (those classified as Moratorium→Achievement, Moratorium and Moratorium→Confusion) and Foreclosed Ss.

School standard differences were found for the Janis-Field, F-Scale and VJS scores and Academic Averages. Sex differences were found in the PNF, Janis-Field and Problems Scale scores (girls obtained higher scores). No significant differences were found between the three socio-economic categories but the differences tended to increase with age.

The EIS, Janis-Field, Problems Scale and F-Scale scores were found to be related to identity formation because the scores inter-correlated significantly for the Developing Ss. Correlations for the

Foreclosed Ss were lower and F-Scale scores failed to correlate significantly with any other measure for the Foreclosed Ss. Janis-Field and Problems Scale scores were found to decrease significantly with age for the Developing Ss and it was concluded that these measures were related to identity development as well as to adjustment.

The results suggested that the Janis-Field Scale measures the 'Self-certainty vs. Self-consciousness' dimension of the identity conflict which is related to the development of autonomy. High scores on the F-Scale were interpreted as reflecting conformity to social norms (in an authoritarian^{society}) and these scores were found to decrease with age for the Developing and Foreclosed Ss. VJS scores correlated significantly with F-Scale scores for the total sample but correlations failed to reach significance when the subjects were divided according to Identity Classification (Foreclosed Ss also obtained higher scores on the VJS). The results suggested that VJS scores were also related to identity development (probably indirectly). Scores on this measure were found to decrease significantly with age for the Developing and Foreclosed Ss.

PNF I scores were found to correlate with EIS scores and with Academic Averages. This measure was designed to reflect identity vs. identity confusion but it was concluded from the results that it reflects social respect vs. social contempt. Academic Averages were not found to be related to identity formation.

No marked sex or school standard differences were found in the correlational analysis although age trends tended to be stronger for the male subjects. This finding was difficult to account for.

EIS sub-scale scores were also analysed and no sex differences were found. The Std. 10s obtained significantly higher mean scores than the Std. 8s and 6s on two sub-scales: II (Self-certainty vs. Self-consciousness) and VI. Identity Classification differences were found on all sub-scales but II and V differentiated best while III differentiated least well. On the whole, sub-scale V correlated best with total scores and with the other sub-scale scores and sub-scale III correlated least well. Sub-scales II and VI scores correlated consistently. The results showed that the EIS has a reasonable degree of internal consistency but that sub-scale III should be revised. This analysis also confirmed the conclusion that the EIS discriminates best between subjects who are experiencing some confusion and those who are not, i.e., that it is not a good measure of identity development.

An analysis of the Peer Nomination Form responses found that girls tend^d to make more nominations than boys (mainly on the positive items), that all subjects were more reluctant to nominate peers on negative items but this decreases with age and more particularly for girls. The number of nominations per item was found to decrease with age. It was also found that on all items the boys tend to nominate more boys than girls, but girls only nominate more girls than boys on the positive items. This suggests a 'bias' which could effect total scores and should be further investigated.

Sub-scales I and II of the Peer Nomination Form were found to correlate significantly. For the boys, Masculinity (III) was found to be related to Social Respect (I) and Social Acceptance (II); but for the girls Femininity (III) was only found to correlate with Social Respect (I). Male scores on II and III^{and female scores on III} appeared to

differentiate between the Identity Classifications in the expected directions. A marked difference was found between the scores for the male and female Foreclosed Ss on all the PNF sub-scales and it was concluded that these findings support Marcia & Friedman's hypothesis (1970) that foreclosure is 'adaptive' for girls because it is socially acceptable. But dependence in boys is regarded with contempt and these boys tend to be socially isolated and regarded as effeminate. This suggested that independence is part of the masculinity stereotype in adolescence. 'Tomboy' (III) was found to be related to identity confusion which supports findings obtained by Douvan & Adelson (1966).

The item analysis of the Problems Scale found that the girls tended to obtain higher 'scores' on nearly all the items (more problems) but the difference was marked for peer relations and appearance. 'Scores' on most of the items decreased with age except for vocational choice and relations with parents which increased. Most of the items discriminated between the Identity Classifications in the expected direction but problems with school work seemed to be ~~x~~ pervasive and unrelated to identity formation. It was concluded that problems involving vocational choice, money matters, physical appearance, and moral issues are 'normal' concomitants of ~~the~~ identity formation while those concerning interpersonal relations (family, peer, teachers) are most frequently reported by Moratorium → Confusion Ss. Religious and Sporting problems were seldom reported.

Analysis of the Vocational Plans Questionnaire responses showed that most subjects in this sample aspired to professional or semi-professional status, but the realism of vocational choice increased

with age and so did the degree of consideration given to vocational choice. The results suggested that vocational choice only becomes a major issue in Std. 8 and that by Std. 10 most boys have decided on their future careers. The girls tended to be less willing to express commitment. The results also suggested that vocational choice is not a central aspect of identity formation in all subjects but this requires further research.

VJS scores were found to differentiate significantly between the Moratorium→Achievement Ss and the Moratorium and Foreclosed Ss. The girls obtained higher scores on this scale and scores were found to decrease with age. The major part of the variance was found in only three items: drinking, smoking and gambling. Responses for lying varied slightly but the majority condemned this and the vast majority of Ss felt that stealing and drug-taking was wrong.

An item analysis of the Values Questionnaire responses showed that sport is more important for boys and appearance for girls. Academic achievement was considered very important by most of the subjects and hobbies, art (cultural activities) and politics were not considered very important by the majority. The importance of family, religion and helping other people decreased marked^{ly} with age while 'having a good time socially', 'having lots of friends' and dating increased in importance.

Eight different value patterns were identified and a shift from parent to peer values was found. The values of the Foreclosed Ss tended to be conventional and stereotyped but their values also changed with age. It was suggested that Foreclosed Ss change their

values in order to conform to their peers, but subjects who are developing their identities change their values because their independence is increasing. The value patterns of the Moratorium→ Achievement Ss were found to be more varied and less conventional than those of Ss in the other categories.

The responses on the rating scales for Elation-Depression, Mood Variability and Peer Relations were also analysed and the differences between the Identity Classifications were in the expected directions. Parent-Child Communication was found to be good on the whole and identity confusion seemed to related to poor communication with father for both boys and girls. | Communication tended to be better with the like-sexed parent except for the Foreclosed and Moratorium→ Confusion boys (tended to communicate better with their mothers). On the Conduct rating scales the Foreclosed Ss tended to rate their behaviour as better than the Developing Ss. The Sociograms and the teacher ratings of physical development (felt to be unreliable) were not analysed.

REFERENCES

- Adams, J.F. Adolescent personal problems as a function of age & sex. Journal of Genetic Psychology. 1964, 104, 207-214.
- Adelson, J. The mystique of adolescence. Psychiatry, 1964, 27, 1-5.
- Adorno, T.W.; Frenkel-Brunswick, E.; Levinson, D.J.; & Sanford, R.N. The authoritarian personality. New York: Harper & Bros. 1950.
- Anastasi, A. Psychological testing. (3rd Ed.) New York: Macmillan & Co. 1968.
- Baldwin, A.E. Theories of Child Development. New York: John Wiley & Sons Inc. 1967.
- Bandura, A. The stormy decade: Fact or fiction? In Grinder, 1969 p. 16-24.
- Bauer, F.C. Problems of dependence and independence. In Bier, 1963, p. 145-151.
- Bier, W.C. The adolescent: His search for understanding. New York: Fordham Univ. Press. 1963.
- Blaine, G.B. Jr. Range of adjustments in adolescence. In Bier, 1963, p. 122-136.
- Block, J. Ego identity, role variability, and adjustment. Journal of Consulting Psychology, 1961, 25, 392-397.
- Blos, P. On adolescence: A psychoanalytic interpretation. New York: Free Press of Glencoe, Inc. 1962.
- Blos, P. Character formation in adolescence. The Psycho-Analytic Study of the Child, 1968, 23, 245-263.
- Bob, S.R. An investigation of the relationship between identity status, cognitive style and stress. Dissertation Abstracts, International, 1970, 30(9-B=, 4358.
- Bronson, G.W. Identity diffusion in late adolescents. Journal of Abnormal and Social Psychology, 1959, 59, 414-417.
- Campbell, D.T. Recommendations for APA test standards regarding construct, trait, or discriminant validity. American Psychologist. 1960, 15, 546-553.
- Campbell, D.T. & Fiske, D.W. Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 1959, 56(2), 81-105.
- Chethik, M.; Fleming, E.; Mayer, M.F. & McCoy, J.N. A quest for identity: treatment of disturbed negro children in a predominantly white treatment centre. American Journal of Orthopsychiatry, 1967, 37, 71-77.

- Chickering, A.W. The development of autonomy. American Journal of Orthopsychiatry, 1967, 37, 203-204.
- Ciaccio, N.V. Erikson's theory of ego epigenesis: Empirical and theoretical perspectives for human development. Dissertation Abstracts International, 1970, 30, (11-B), 5252-5253.
- Cohen, H.A. & Miller, R. Mobility as a factor in adolescent identity problems. Psychological Reports, 1969, 25, 775-778.
- Coles, R. Erik H. Erikson: The growth of his work. Boston: Little, Brown & Co. 1970.
- Constantinople, A. An Eriksonian measure of personality development in college students. Developmental Psychology. 1969, 1(4), 357-372.
- Coopersmith, S. A method for determining types of self-esteem. Journal of Abnormal and Social Psychology. 1959 50, 87-94.
- Cronbach, L.J. Essentials of psychological testing. (2nd Ed.) New York: Harper & Row. 1960.
- Cronbach, L.J. & Meehl, P.E. Construct validity in psychological tests. Psychological Bulletin. 1955, 52(4), 281-302.
- Cross, H.T. & Allen, J.G. Ego identity status, adjustment, and academic achievement. Journal of Consulting & Clinical Psychology, 1970, 34(2), 288.
- Davids, A. Alienation, social apperception, and ego structure. Journal of Consulting Psychology. 1955, 19(1), 21-27.
- De Levita, D.J. On the psycho-analytic concept of identity. International Journal of Psycho-Analysis. 1966, 47, 299-305.
- Deutsch, H. Selected problems of adolescence. The Psychoanalytic Study of the Child, Monograph No. 3, 1968.
- Dignan, M. Howard, Sr. Ego identity and maternal identification. Journal of Personality and Social Psychology, 1965, 1(5), 476-483.
- Douvan, E. & Adelson, J. The adolescent experience. New York: John Wiley, 1966.
- Duncan, C.B. A reputation test of personality integration. Journal of Personality and Social Psychology, 1966, 3(5), 516-524.
- Emmerich, W. How are measurement strategies related to models of human development? In Untangling the tangled web of education. (Papers read at a symposium sponsored by the National Council on Measurement in Education, in New York). Princeton, New Jersey: Educational Testing Service, 1969 (a)
- Emmerich, W. Models of continuity and change in development. In Disadvantaged children and their first school experiences: From theory to operations. (ETS-Headstart Longitudinal Study report.) Princeton, New Jersey: Educational Testing Service, 1969(b).

- Erikson, E.H. Problems of infancy and early childhood. Reprinted in Murphy, G. & Bachrach, A.J. (Eds): An outline of abnormal Psychology (2nd Ed.). New York: Modern Library, 1954.
- Erikson, E.H. Identity and the life cycle. Psychological Issues, 1959, 1(1), Monograph 1. (New York: International University Press).
- Erikson, E.H. Insight and responsibility. New York: W.W. Norton & Co. Inc. 1964.
- Erikson, E.H. Childhood and society. (2nd Ed.) Penguin Books, 1965.
- Erikson, E.H. The eight ages of man. (Discussants: Murphy, L.; Green, M.; Henry, J.; Friedenberg, E.) International Journal of Psychiatry, 1966, 2(3), 281-307.
- Erikson, E.H. Identity: Youth and crisis. London: Faber & Faber, 1968.
- Erikson, E.H. Gandhi's truth: On the origins of militant nonviolence. New York: W.W. Norton & Co., Inc. 1969.
- Ferguson, G.A. Statistical analysis in psychology and education. New York: McGraw-Hill Book Co., Inc. 1959.
- Friedenberg, E.Z. The isolation of the adolescent. In Bier, 1963, p.11-20.
- Fromm, E. The fear of freedom. London: Routledge & Kegan Paul, Ltd. 1950.
- Fromm, E. The sane society. London: Routledge & Kegan Paul, Ltd. 1963.
- Galinsky, M.D. & Fast, I. Vocational choice as a focus of the identity search. Journal of Counselling Psychology. 1966, 13(1), 89-92.
- Ginsburg, H. & Opper, S. Piaget's Theory of Intellectual Development: An introduction. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1969.
- Gold, M. & Douvan, E. Adolescent development: Readings in research and theory. Boston: Allyn & Bacon, Inc. 1969.
- Gottlieb, D. & Reeves, J. Adolescent behaviour in urban areas. London: The Free Press of Glencoe, Collier-Macmillan, Ltd., 1963.
- Gregor, A.J. & McPherson, D.A. Racial preference and ego-identity among White and bantu children in the Republic of South Africa. Genetic Psychology Monographs, 1966, 73, 217-253.
- Gribbons, W.D. & Lohnes, P.R. Shifts in adolescents' vocational values. In Gold & Douvan, 1969, p. 259-262.
- Grinder, R.E. Studies in adolescence: A book of readings in adolescent development. (2nd Ed.) London: Macmillan Co., 1969.
- Gruen, W. Rejection of false information about oneself as an indication of ego identity. Journal of Consulting Psychology, 1960, 24(3) 231-233.

- Gruen, W. Adult personality: An empirical study of Erikson's theory of ego Devt. In B.L. Neugarten (Ed): Personality in middle and late life: Empirical studies. New York: Atherton Press, 1964. 1-14.
- Hall, C.S. & Lindzey, G. Theories of personality. New York: John Wiley & Sons, Inc. 1957.
- Hamilton, D.L. Measures of self-esteem, dominance, and dogmatism: convergent & discriminant validity. Proceedings of 77th Annual Convention of the American Psychological Association, 1969, 4(1), 127-128.
- Hartman, B. A survey of college students problems identified by the Mooney Problem Checklist. Psychological Reports. 1968, 22, 715-716.
- Hartocollis, P. Some phenomenological aspects of the alcoholic condition. Psychiatry, 1964, 27, 345-348.
- Hayman, A. Verbalization and identity. International Journal of Psycho-Analysis. 1965, 46, 455-466.
- Heilbrun, A.B. Jr. Conformity to masculinity-femininity stereotypes and ego identity in adolescents. Psychological Reports. 1964, 14, 351-357.
- Hershenson, D.B. Sense of identity, occupational fit, and enculturation in adolescence. Journal of Counselling Psychology. 1967, 14(4), 319-324.
- Hess, R.D. & Goldblatt, I. The status of adolescents in American society: A problem in social identity. In Gold & Douvan, 1969, p.346-351.
- Hill, J.P. & Shelton, J. (Eds.). Readings in adolescent development and behaviour. New Jersey: Prentice Hall, Inc. 1971.
- Hovland & Janis, K. (Eds.). Personality and persuasibility. New Haven & London: Yale university Press, 1959.
- Howard, S.M. & Kubis, J.F. Ego identity and some aspects of personal adjustment. Journal of Psychology, 1964, 58, 459-466.
- Jacobson, E. Adolescent moods. The Psychoanalytic Study of the Child, 1961, 16, 164-183.
- Jones, M.C. & Bayley, N. Physical maturing among boys as related to behaviour. In Seidman, 1953, p. 149-167.
- Jones, M.C. The later careers of boys who were early- or late-maturing. Child Development, 1957, 28, 113-128.
- Kaczkowski, H. Sex and age differences in the life problems of adolescents. In Grinder, 1969, p. 179-183.
- Koenig, W. Chronic or persisting identity diffusion. American Journal of Psychiatry, 1964, 120(2), 1081-1083.

- L'Abate, L. The status of adolescent psychology. Developmental Psychology, 1971, 4, (2), 201-205.
- Laing, R.D. The divided self. Penguin Books, 1965.
- Loevinger, J. The meaning and measurement of ego development. American Psychologist, 1966, 21, 195-206.
- Lynd, H.M. On shame and the search for identity. New York: Science Editions, Inc. 1961.
- Maier, H.W. Three theories of child development. New York: Harper & Row. 1965.
- Marcia, J.E. Development and validation of ego-identity status. Journal of Personality and Social Psychology. 1966, 3(5) 551-558.
- Marcia, J.E. Ego-identity status: Relationship to change in self-esteem, general maladjustment, and authoritarianism. Journal of Personality, 1967, 35(1), 113-133.
- Marcia, J.E. & Friedman, M.L. Ego identity status in college women. Journal of Personality, 1970, 38(2), 249-263.
- McNassor, D. Social structure for identity in adolescence: Western Europe and America. Adolescence, 1967, 2(7), 311-334.
- Mogar, R.E. Value orientations of college students. Psychological Reports, 1964, 15, 739-770.
- Morgan, J.C. Adolescent problems and the Mooney Problem Check List. Adolescence, 1969, 4(13), 111-126.
- Murray, J.B. The identity image of the college student. Psychological Reports. 1964, 14, 267-271.
- Mussen, P.H., Conger, J.J., and Kagan, J. (Eds.). Readings in child development and personality. New York: Harper & Row, 1965.
- Mussen, P.H. & Jones, M.C. Self-conceptions, motivations, and interpersonal attitudes of late- and early-maturing boys. In Mussen et al, 1965, p. 419-434.
- Muuss, R.E. Theories of adolescence. New York: Random House, Inc. 1962.
- Offer, D; Marcus, D; Offer, J. A longitudinal study of normal adolescent boys. American Journal of Psychiatry, 1970, 126, (7) 917-924.
- Orpen, C. Authoritarianism in an 'authoritarian' culture: the case of Afrikaans-speaking South Africa. Journal of Social Psychology, 1970, 81, 119-120.
- Orpen, C. Authoritarianism and racial attitudes among English-speaking South Africans. Journal of Social Psychology, 1971(a), 84, 301-302.

- Orpen, C. Prejudice and adjustment to cultural norms among English-speaking South Africans. Journal of Psychology, 1971(b), 77, p.217-218.
- Orpen, C. The relationship between extraversion and tough-mindedness in a 'tough-minded' culture. Journal of Psychology, 1971(c), 78, p. 27-29.
- Orpen, C. The effect of cultural factors on the relationship between prejudice and personality. Journal of Psychology, 1971(d), 78, p. 73-79.
- Podd, M.H.,; Marcia, J.E.; & Rubin, B.M. The effects of ego identity and partner perception on a prisoner's dilemma game. Journal of Social Psychology. 1970, 82, 117-126.
- Prelinger, E. & Zimet, C.N. An ego-psychological approach to character assessment. New York: The Free Press of Glencoe. 1964.
- Rasmussen, J.E. An experimental approach to the concept of ego identity as related to character disorders. Unpublished Doctoral Dissertation, American University, 1961.
- Rasmussen, J.E. Relationship of ego identity to psychosocial effectiveness. Psychological Reports, 1964, 15, 815-825.
- Rogers, D. (Ed.). Issues in adolescent psychology. New York: Meredith Corporation. 1969.
- Scheffé, H. The analysis of variance. New York: Wiley & Son, Inc. 1959.
- Schneiders, A.A. The adolescent's search for identity. In Bier, 1963, p. 137-144.
- Searles, H.F. Concerning the development of an identity. Psychoanalytic Review, 1966, 53(4), 7-30.
- Seidman, J.M. (Ed.). The adolescent: A book of readings. New York: Dryden Press. 1953.
- Shainberg, D. "It really blew my mind": A study of adolescent cognition. Adolescence, 1970, 5(17), 17-36.
- Simmons, D. D. Development of an objective measure of identity achievement status. Journal of Projective Techniques & Personality Assessment, 1970, 34(3) 241-244.
- Singer, E. Identity versus identification: A thorny psychological issue. Review of Existential Psychology and Psychiatry, 1965. 160-175.
- Sommers, V.A. The impact of dual-cultural membership on identity. Psychiatry, 1964, 27, 332-344.
- Spiegel, L.A. A review of contributions to a psychoanalytic theory of adolescence: Individual aspects. In Gold & Douvan, 1969, p.5-13.

- Strauss, A.L. Mirrors and masks: The search for identity. Illinois: Free Press of Glencoe, 1959.
- Strickland, L.H. & Janicki, W.P. An alternative form of a forced-choice F-scale. Psychological Reports. 1965, 16, 933-940.
- Tabachnick, N. Three psycho-analytic views of identity. International Journal of Psycho-Analysis. 1965, 46, 467-473.
- Tabachnick, N. Self-realization and social definition: Two aspects of identity formation. International Journal of Psychoanalysis. 1967, 48, 68-75.
- Toolan, J.M. Identity formation in adolescence. American Journal of Orthopsychiatry, 1967, 37, 401-402.
- Tuddenham, R.D. Studies in reputation: I. Sex and grade differences in school children's evaluations of their peers. The diagnosis of social adjustment. Psychological Monographs, 1952, 66(1), No. 333, 1-58.
- Warner, W.L.; Meeker, M. & Eells, K. Social class in America: The evaluation of status. Harper Torchbooks, 1960.
- Waterman, A.S. & Waterman, C.K. Relationship between ego identity status and satisfaction with college. Proceedings of the 77th Annual Convention^{APA}, 1969, 4(2), 653-654.
- Waterman, C.K.; Buebel, M.E. & Waterman, A.S. Relationship between resolution of the identity crisis and outcomes of previous psychosocial crises. Proceedings, 78th Annual Convention of American Psychological Association, 1970, 467-468.
- Welch, M. Confusion and the search for identity. Journal of Analytical Psychology, 1968, 13(2), 118-130.
- Wessman, A.E. & Ricks, D.F. Mood and Personality. Holt, Rinehart & Winston, Inc., 1966.
- Wiggins, J.S. & Winder, C.L. The Peer Nomination Inventory: An empirically derived sociometric measure of adjustment in pre-adolescent boys. Psychological Reports, 1961, 9, 643-677.
- Wright, D. & Cox, E. A study of the relationship between moral judgement and religious belief in a sample of English adolescents. In Gold & Douvan, 1969, p. 331-336.